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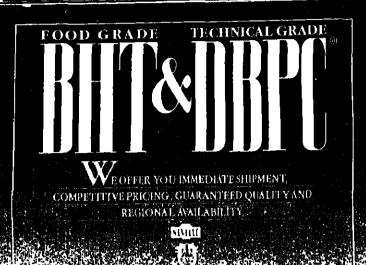
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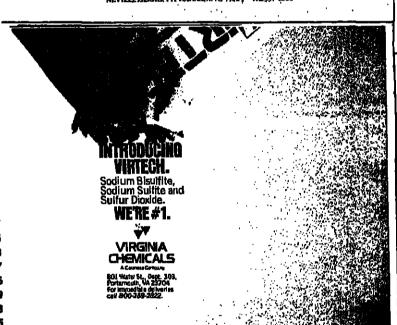
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# ET INDEX

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CHEMICAL MARKETING REPORTER's market index of chemicals and related materials (100=1974 average), based on	Dec. 12, 1986 151.51 Nov. 28, 1986 151.83
97 key commercial chemicals, appears alongside with data for two weeks ago, last month and	Dec. 13, 1985 153,65
last year,	Chemical Prices Start on Page 36 k

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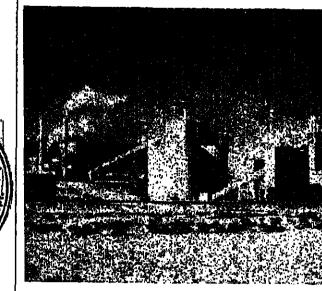
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# CHEMICAL MARKETING CUE

CHLORINATED SOLVENTS: Firms state higher BETA-CAROTENE: The number of firms in the bus multiplies LINEAR ALKYLATES: Detergent Use is 3000 mature by 1988 HELIOTROPINE; The pricing trend shall





**Soda Ash Prospects** 

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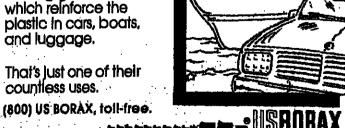
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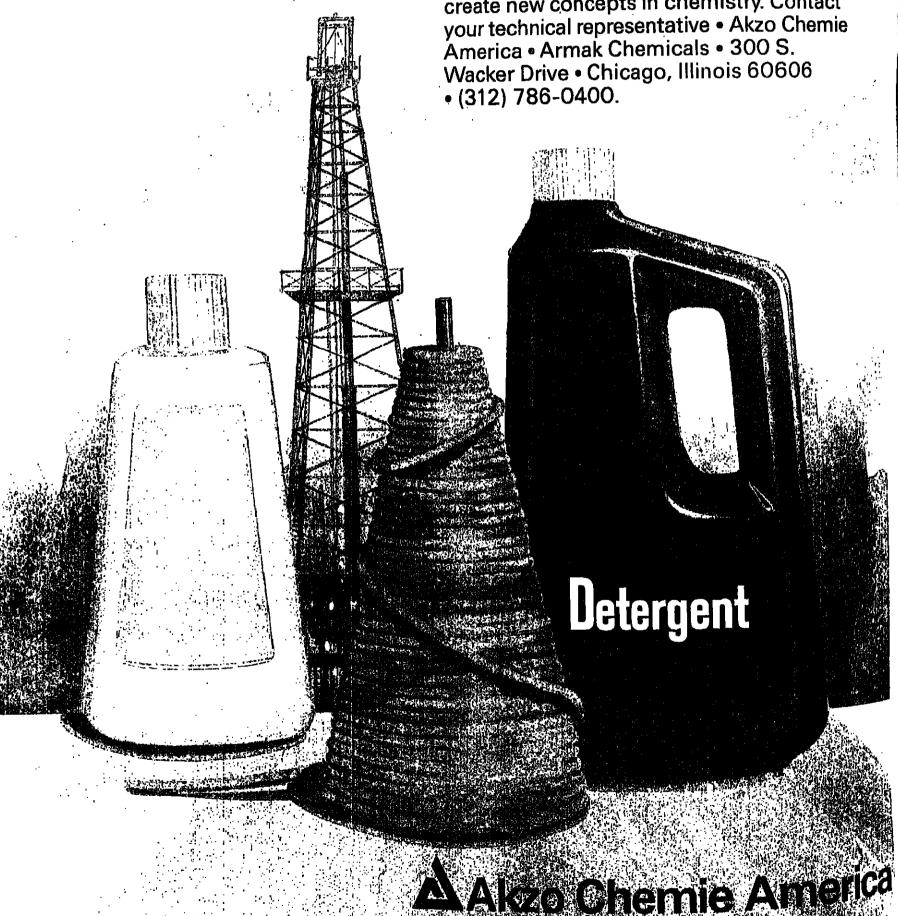
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# Soda Ash Picture Is Bright

During 1976, soda ash producers made a record amount of product at operating rates unmatched since 1980. Next year is expected to be equally strong, and producers hope that profitability, long a sore spot for the business, will begin to follow suit.

Probably the most telling sign of the industry's greath this year is what Bill Breunig, FMC Corporaim marketing director for soda ash, termed "a tenmintimprovement in operating rates" as compared to

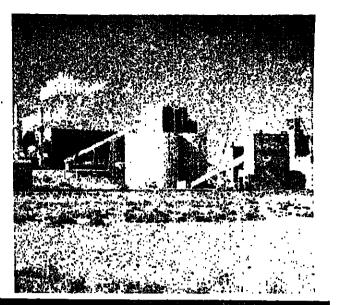
Higher operating rates are coming as a combination danoverall production increase for the year of about inercent, and the simultaneous effect of the closing of General Chemical's Syracuse facility in January of

issyear.
Based on nameplate capacities, 1986 operating

rates should average between 84 and 86 percent. Most producers feel, however, that the industry effective capacity is overstated by as much as 700,000 tons, so that effective or actual operating rates are probably in

Soda ash demand varies cyclically depending on activity in specific end use segments. Mr. Breunig points out that in May and June of this year demand was so strong that producer stocks were drawn down by over 100,000 tons. Producers are poised to enter 1987 with stocks lower by almost that much, as compared to at the beginning of this year. Soda ash capac-Continued on Page 20

TEXASGULF SODA ASH: At Green River, Wyo. Current output for the Industry is in the upper 80 percent to low 90 percent range of capacity depending on what nameplate figure is used.



# Toxic Waste Site Rules ssued to Protect Workers

Cling known incidents of deaths from are not covered by the interim rule since they moure to toxic chemicals, the Reagan viministration last week issued new with and safety regulations aimed at polecting up to 200,000 American where at superfund and other haznious waste sites.

The new regulations by Occupational ikty and Health Administration, which are distive immediately, were ordered by Conis last Fall when it reauthorized and readdesuperfund program for cleaning up assands of abandoned toxic waste dumps. The President and Congress have acted inchave responded," says OSHA director Pendergrass. "Our action is part of a

accumulating industrial and other Rerules require periodic medical exams laminimum of 40 hours of safety and thraining for workers at both superfund and currently operating dumps hanalazardous wastes such as toxic chemi-

iliagency effort to meet head-on the

Memsthe nation faces because of decades

ine of the rules also apply to emergency plice, ambulance and other workers respond to spills and rail or highway

Reinterim final rule will remain in effect 200tober 18, 1988 when OSHA is required we a permanent standard. The agency Tales its standard will cover 25,255 sualud sites with 30,300 workers and about active hazardous waste dumps with

come under regulations of the Transportation Department.

OSHA officials say they do not know the extent of the danger to site workers.

"The problem here is going into an un-known environment and assuring that workers are protected in it," says Thomas Sey-mour, an OSHA official who helped draft the

The regulations also require cleanup and dump operators to provide employees with proper protective clothing and equipment. In addition, they require extensive air monitoring of the sites for toxics, issuing detailed reports to employees on anticipated exposures that exist before they enter a potentially dangerous area and developing emergency response programs.

Frank A. White, deputy assistant secretary of OSHA, says the agency went beyond the minimum requirements mandated by Congress "in order to assure complete protection of hazardous waste workers." He says OSHA is targeting about 100 sites per year for in-

"We will attempt to focus on those sites where workers are present," says Mr. White. "If a complaint is filed by an employee, we would give that the highest priority."

While some members of Congress and labor unions have criticized OSHA during President Reagan's term for not adequately protecting workers' health and safety, Mr. White says, "OSHA has set its priorities and has limited resources. There are other concerned parties who have priorities of their testimated 13,120 EPA-licensed hazown. but OSHA can move only so fast on so many issues at one time."

# blogen's Alpha Interferon faces Patent Loss in Europe

le European Patent Office plans to action does not affect Schering-Plough's ability to market "Intron A" in Europe and does ity to market "Intron A" in Europe and does the Blogen's patent for geneticallyintered alpha interferon, which is atted in the US and Europe under name "Intron A" by Biogen's li-

e Schering-Plough Corporation palent office issued an oral decision the 12, which is expected to be cona written opinion within three to

Blogen says it will "aggregated"

With that action, alpha interferon became
the first product of biotechnology to be apths Blogen says it will "aggressively an appeal of the final ruling.

Mining to Biogen, the patent office afbut objected to the scope of the which was issued in 1984. The patent 4 look such a narrow view of what is table as to render the allowable patent

Arrially useless, Biogen complains.

Milmann-La Roche Inc., one of the firms

Mallenged Biogen's patent, says it ob
the Biogen patent because it cov
the precureer melacule to slabe interbe precursor molecule to alpha interrather than just the mature molecule d Boche is currently seeking a European Allorits own version of alpha interferon, Roferon A." an says the European Patent Office's

Roche from challenging the patent itself for "Intron A." Biogen says worldwide sales this year of "Intron A" are expected run somewhere be-

not affect "Intron A's" patent position in the

Earlier this year, Food & Drug Adminis-

tration approved commercial use of both "In-

proved in the US for the treatment of cancer.

ment by Roche and Schering-Plough not to

file patent infringement suits against eachother's alpha interferon products in the US or

Europe. The agreement did not prevent

US marketing approval followed an agree-

tween \$8 million and \$10 million. Separately, Biogen said last week that it has agreed to license its gamma interferon cancer therapy to Baxter Travenol. Baxter will have exclusive rights except in the Far East and West Germany. The product is in phase three trials in the US for treatment of renal cell cancer.

# **Chemical** Marketing Reporter DECEMBER 22, 1986

# Dow Is Bullish **On Plastic Outlook**

about the outlook for polyolefins and polystyrenics. Lee Shobe, general manager of Dow's Olefin & Styrene Plastics Department, reaffirmed the company's commitment to these markets at an informal update in New York last week.

Currently, he said, economic conditions, in particularly improved cost position with respect to paper, glass and metal, bode well for the plastics in an atmosphere of increased consolidation, strong demand and high capacity utilization.

Growth should be sustained in older markets, while new products introduced this year are expected to find prominent niches, snarlng some share from polypropylene, engineering thermoplastics, EVA copolymers

Despite the "reverse shock" which hit the plastics industry when crude oil and deriva-tive raw material prices plunged early this year, margins have improved, Mr. Shobe stated, and the plastics markets either been "on track," or have outperformed last year's

Growth this year has been particularly dramatic in the polystyrene extrusion and molding markets, which grew by 10 percent, three times the growth rate seen from 1981 tron A" and "Roferon A" for treatment of through 1985. Disposable packaging, particuhairy cell leukemia (CMR, 6/9/86, pg. 5). Jarly forfast-food and durable electronics end markets led the way, Mr. Shobe said.

The market for high density polyethylene, he adds, grew 6.8 percent this year, 70 percent of the 9.2 percent overall growth it saw from 1981 through 1985. New applications, particularly increased use of the plastic in oil bottles and chemical storage tanks, are said to have fueled this growth.

For the future, Dow expects at least 4 percent growth for polystyrene next year, with 4 to 5 percent growth for polyethylene. Capacity utilization should move up modestly through debottlenecking and incremental ex-

Raw material cost and supply is "not the immediate issue," Mr. Shobe reiterated. Crude oil is expected to remain at its current price levels for some time to come. Feedstock processing versatility will be the deter-

Dow Chemicals USA is optimistic mining factor; ability to shift between heavy and light feedstocks will be the best cost pro-

> Currently, capacity utilization for HDPE is said to be 99 percent of nameplate; rates for the more mature LDPE market are around 84 percent. Polystyrene capacity has been rationalized this year; even with less capacity, utilization stands at 93 percent of namoplate and 100 percent of effective total.

Given strong demand, expansions are probably inevitable, but, Mr. Shobe noted they will be implemented with caution. De ottlenecking and incremental increases will

"Ongoing restructuring and increased in-Continued on Page 44



LDPE PRODUCTION: At a Dow Chemical facility the company says industry LDPE output is 84 percent of capacity.

December 22, 1986

The Federal government should take stronger action to protect laboratory workers from health hazards than the measures proposed by Occupational Safety & Health Administration, says the AFL-CIO. A standard proposed by OSHA covering laboratories in the chemical industry, hospitals and universities "is so weak and so vague that it will provide little protection to laboratory workers who are exposed to hazardous substances," says AFL-CIO

safety specialist Margaret Seminario. In similar comments to the agency, the International Chemical Workers Union and Public Citizen Health Research Group charged jointly that OSHA "seems far more concerned about saving laboratory employers some money than protecting laboratory employees from well-documented health

In a letter to OSHA officials, Ms. Seminario says the agency's proposed rule, which would pre-empt other Federal standards, would actually "diminish protections afforded these workers" currently.

The proposal would permit laboratories to develop plans for protecting workers based on their "unique" working conditions. OSHA's performance-oriented proposal notes that laboratory workers will be exposed to lesser amounts of a greater number of chemicals, but those workers and their supervisors are "usually highly trained and knowledgeable" about the hazards involved with the chemicals they use.

As a result. Ms. Seminario says OSHA's proposal would exclude "almost all specific protective requirements found in other stan-

"No level of performance is specified" Continued on Page 45

# **Kellogg Joint Venture Has PRC Contracts**

SinoKellogg Engineering Company, a joint venture of China Petro-Chemical International Company and M.W. Kellogg Company, has been awarded contracts valued at \$75 million for two plant projects.

The company will provide a 60.000-ton-ayear linear low-density polyethylene unit at Lanzhou for Lanzhou Chemical Industry Company, using gas-phase, fluid-bed PE

technology developed by BP Chemicals Ltd.
The grassroots LLDPE plant, located within an existing petrochemical complex, will start up in 1990. Ethylene will come from an adjacent plant currently being modernized to use Kellogg's proprietary short-

residence time furnace technology. The SinoKellogg joint venture will also modernize a 1,000-metric-ton-a-day ammonia plant at the Dong Ting nitrogen fertilizer complex at Yueyang, Hunan. The project is scheduled for completion in 1989. The naphtha-based plant is one of 10 ammonia production facilities provided to the People's Re-

public of China by Kellogg during the 1970's.

The PE and ammonia projects are the first undertaken in China by Kellogg under the joint venture since it was formed in 1984 to provide engineering and construction ser-vices both inside and outside the PRC.

# Fiber In Flight Of Voyager

The experimental Voyager aircraft, which is being flown around the world without stopping or refueling, is constructed largely of graphite fiber supplied by Hercules Incorporated and uses a new synthetic aviation fuel developed by Mobil Oil Corporation.

According to Hercules, 90 percent of the Voyager's structure is lightweight "Magnamite" graphite fiber. The fiber is embedded in an epoxy resin, producing a composite that is stronger than steel, ighter than aluminum and stiffer than titantanium, Hercules says.

The Voyager had a total weight at takeoff last week of 9,750 pounds, including 7,000 pounds of fuel.

Plans call for the Voyager to be in flight 300 hours or more without stopping or refueling. Such a flight would not be possible with conventional aviation oils, according to Mobil, because they require changing every 25 to 50 hours.

# **Methylene Chloride** Replaced by Eastman

Eastman Chemical Products Inc. says its technical service and development laboratories have found two effective solvent blends as replacements for paint strippers containing methylene chloride.

One blend contains 5 percent "Ektapro" EEP sovent. 30 percent MAK and 20 percent n-butyl alcohol, while the other contains 40 percent "Ektapro" EEP solvent, 50 percent MAK and 10 percent "Ektasolve" EP solvent. According to the company the compounds' laboratory evaluations confirmed that they are effective in stripping household-type paints such as alkyd enamels, latex paints, varnishes and shellac.

Blend No. I was found to have a flash point of 103°F and blend No. 2 had a flash point of 112°F. Both were reported to be as effective as paint strippers made with methylene chloride in tests on oil-based alkyd enamel paints. Aromatic hydrocarbons could be added to the blends to lower cost; however, Eastman's tests have shown that a decrease in effectiveness would result

Blend No. 1 is more economical to use than blend No. 2 because n-butyl alcohol is used. However, it contains a lower level of ketone and glycol ether solvents in order to obtain a lash point above 100°F and is not as active

# Fermenta's Founder Relinquishing Post

Refaat el-Sayed, founder and president of Sweden's Fermenta AB, will reportedly turn over a 43 percent interest in the firm to AB Industrivaerden, a holding company, to settle debts amounting to almost \$80 million. Mr. el-Sayed's remaining 33 percent stake in Fermenta is being held as collateral for other

Montedison SpA earlier dropped plans to buy Mr. el-Sayed's interest in Fermenta after he sold key assets to other parties. AB Industrivaerden, meanwhile, reportedly plans to sell its stake in Fermenta at a later date.

Mr. el-Sayed and other Fermenta board members are expected to be replaced at a special shareholders meeting. Swedish authorities are investigating Fermenta board members for possible insider trading of Fer-

# **Monsanto Loses** Benzene Lawsuit

Monsanto Company has been ordered by a Federal grand jury in Texas to pay \$108 million to the family of a former Monsanto plant worker who died of leukemia in 1980. Monsanto says it will appeal.

The company, found to be grossly negligent in failing to monitor benzene exposure levels at its Chocolate Bayou facility, argued unsuccessfully that there is no medical link between between exposure and the type of leukemia that afflicted the plant worker.

Monsanto further argued that it constantly monitored benzene exposure levels and tha they were consistently "well below" the Federal exposure standard of 10 parts per million. The company said the plant was designed to limit exposure to 1 part per million.

# **Orphan Drug Grants**

Food & Drug Administration has awarded 21 grants for the development of orphan drugs and other products during the 1987 fiscal year that began October 1. That is the in bulk storage capacity scheduled to be in products program began in 1982. An orphan product is one intended to treat rare disorpercent increase in production capacity, due ders and thus has little likellhood of commercial development.



R.W. Scher, who has been aiton. He was most recently senior vice-president for agribusiness and chairman of Agrige-netics, a Lubrizoi subsidiary.

# Polypropylene Plant Slated in South Korea

Himont U.S.A., Incorporated, last week said that, together with Mitsui Petrochemical Industries, Ltd. (Japan), it has signed an agreement with Honam Petrochemical Corporation (South Korea) that will grant to Honam Petrochemical a license for Himont's 'Spheripol" process for a new 80,000-metricton-per-year polypropylene plant to be con-structed at Yeochon City.

The process was developed by Himont with technology generated under a cooperative research and development agreement with Mitsui. It involves loop reactors liquid monomer and fluid bed gas-phase polymerizations with high-yield high-stereospecificity (HY-HS) catalyst to produce resins and a range of impact copolymers.

Honam Petrochemical already operates an 80,000-metric-ton-per-year polypropylene plant at Yeochon City.

# **Analytical Laboratory Bought by Ohio Firm**

Environmental Treatment and Technologles Corporation, Findlay, Ohio, says it has acquired Toxicon Laboratories, Inc. of Baton Rouge, La., making it the fifth in ETTC's network of environmental analytical facili-

Toxicon Laboratories, Inc., founded by Michael Crouch, specializes in toxic and hazardous waste analyses. According to James L. Kirk, president and CEO of ETTC, the acquisition of Toxicon will allow ETTC to expand its analytical and data base management services in the Gulf Coast region of the

Terms of the acquisition were not dis-

ETTC, based in Findlay, is the nation's leading environmental services firm engaged primarily in the application of on-site treatment technologies to solve industry's nmental problems.

# Dynamit Nobel **Expanding Silanes**

Dynamit Nobel Chemicals has begun a two-phase expansion of storage and production capacity for organofunctional silanes at its Theodore, Ala., plant.

place in the first quarter of 1987. Construcpercent increase in production capacity, due for completion during the third quarter of the

# **Chemical** Marketing Reperter

ounded October 18, 1871, by William O. Million Founded October 18, 1871, by William D. Allein Directed 1900-1842 by Herry J. Schief Schnell Publishing Company, bo. 100 Crurch Street, New York, N.Y. 10007-289 (212) 732-9820. Telex Number: 228113 CARI IR. Cable Address: Reporter, New York Copyright 1986 by Schnell Publishing Conjuny, In.

ABO

EDITOR-IN-CHIEF.

Chloralkalkali

To Be Restarted

At Taft, La., Site

Occidental Chemical Corporation last

seek announced a completion schedule

magroject to bring back on stream 450

tous per day of idled chloralkali capacity

According to Jack Hurst, senior vice-presi-

int of manufacturing and corporate engineering for OxyChem's Electrochemicals,

elergent & Specialty Products Group, the

melable calls for approximately one-third

d the idled diaphragm cell capacity to be islated by April 1987. The remainder will be

Upon completion of this project, the Taff

and will have a total effective capacity of

ब्बर 1,650 tons per day of chlorine and over

ilillions per day of caustic soda," says Mr.

in addition, this start-up will contribute official economy by adding about 50 jobs title plant's existing workforce of over 350

Churk Mears, vice-president and general

emager of the corporation's Electrochemi-

ik Division, cites OxyChem's strategy of

amg adequate chlor-alkali production ca-

kiyavallable in anticipation of market de-

Continued on Page 19

Dioxin Ban Suit

Rule Criticized

The Hazardous Waste Treatment

Council and Natural Resources Defense

Aamendments to the Resource Conserva-

of Recovery Act, the Federal toxic waste

opany and contract employees."

aits Taft, La., plant.

slored by mid-year.

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The agency's approach would allow vast Magnes of solvent waste to escape the ban SCHNELL PUBLISHING CA two years, and even allow such wastes Chairman of the Board, Jean School Micholoss; Rresident, Arthur R. Kander and Presidents, Eva S. Auchinioss, San and Cordon and Kathryd' A. Portel Scott Treasurer, Mary Says. n aperfund cleanups to be disposed of in

and pits," says Richard C. Fortuna, exec-aredirector of HWTC. it says the move not only endangers pub-bealth it also punishes those firms that e invested in proper management. "Dehas been snatched from the jaws of vicdr. Fortuna says that despite "clear consional intent to prohibit land disposal of

rested solvent and dioxin wastes now," tiles will allow continued disposal of the Continued on Page 45

# **Superfund Program** Endangered by OMB, According to Florio

week that the new superfund program is already being jeopardized by Reagan unacceptable" veto power over all regulations and decisions by Environmental Pro-Administration infighting over environmental policy that has delayed a presidential order to implement the \$9 billion toxic waste cleanup program.

The congressman warned that cleanup of toxic waste sites under the expanded pro- and lacks the environmental sensitivity gram has come to a virtual standstill because of the failure by the President to issue the Executive Order required to begin implementing superfund. No cleanup work can be approved without the order.

'In effect," says Rep. Florio, "implemenlation of long-term cleanup work at the 888 superfund sites across the country has come to a standstill pending the issuing of the new Executive Order for superfund."

He noted that a long delay in issuing the order for the original superfund program in 1980 substantially slowed the start of the program then.

Rep. Florio said the delay in issuing the Executive Order is resulting from the attempt by the Office of Management &

tection Agency regarding the superfund pro-

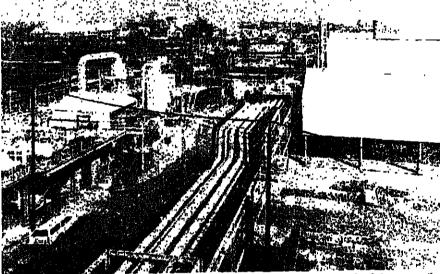
He said the final authority over superfun must remain with EPA and not with OMB because the White House budget office "has resisted aggressive environmental action needed to clean up toxic waste sites."

Giving OMB the veto power it seeks over superfund decisions would severely undermine the program, Rep. Florio warned.

He cited as an example OMB's effort to give all Federal agencies including the military, the authority to supervise cleanup work at their own waste sites when it was the "clear intent of Congress in the superfund law to give EPA authority over cleanups at all Federal sites."

In letters to OMB director James C. Miller and EPA Administrator Lee M. Thomas, Rep. Florio called on the agencies to end dispute so that the president can issue

Continued on Page 45



CHLORALKALI AT TAFT: About a third of the idled capacity here will go back into operation, according to Occidental Chemical. This will take effective capacity to 1,850 tons a day of childrine and 1,850 tons a day of caustic sods.

# Filed by Activists; Groundwater Pollution Problems **Studied by Chemical Engineers**

Confusion about which government would be a start. This should alleviate finanagencies should deal with groundwater cial pressures, they say, while speeding up pollution is a major obstacle to safeguarding the nation's water supply.

Quell have filed suit in a US court of Peals against Environmental Protec-In a new whitepaper, a task force studying groundwater quality for the American Insti-In Agency in an effort to modify the iency's recently final land disposal ban tute of Chemical Engineers says that "this multiplicity of responsible parties leads to duplication of effort, haphazard and uneven de covering solvent and dioxin-conibing wastes.

EPA's November 7 final rule established

A PA's November 7 final rule established implementation of statutes, and a lack of sope and conditions of restrictions on the accountability for the problem." disposal of these wastes as ordered by

In addition to overlap among the 11 Federal and approximately 100 state agencies involved in the issue, the new report lists the clean from contamination. water and testing the tens of thousands of use of risk-benefit analysis to set drinking new chemicals manufactured each year as water protection standards and, "despite the other problems hampering protection of the need for reductions in government spendresource which accounts for half of the na-tion's drinking water. A shortage of scientists search. "Planning and zoning development and engineers trained in hydrogeology and environmental chemistry and the complex-ceptible to contamination also "makes good ity of the contamination issue, when "nearly every cleanup or prevention option has sig-

policy that designates authority among exist tion and the impact of current laws on cleaning agencies and consolidates their efforts; up efforts.

government and industry efforts with clear

The report also supports the Environmental Protection Agency's proposal to categorize the quality of different groundwater supplies. "It is unrealistic to try to protect all groundwater at a uniform standard," it argues, citing supplies that have been contami-nated by saltwater or naturally occuring toxins. The white paper stresses the importance of preserving groundwater that is currently

The chemical engineers recommend the long-term economic sense," they say. The nificant pro's and con's," are also stumbling- tives to encourage the recycling or incineration of hazardous waste.

What are the possible solutions to these problems? The chemical engineers suggest that a comprehensive national groundwater that are the possible solutions to these problems? The chemical engineers suggest that a comprehensive national groundwater that a comprehensive national grou

# **Toxic Waste** May Touch Off **Industry Gain**

The overall market for hazardous waste management and disposal is expected to grow at an average annual rate of 8.3 percent for at least the next five years, according to a new report by FIND/SVP, New York-based market research and information services com-

The firm estimates the current market at \$10.9 billion, and forecasts that as major suppliers continue to seize the commercial opportunities of waste control legislation and public pressures to clean up the environment, the total market will reach \$17.4 billion by

"This industry is poised for increased growth because government controls are intensifying in response to public pressure," comments Peter Allen, manager of market research reports for the company. "Every segment of the industry is directly driven, defined, and in some cases created by legislation and regulations. Companies that generate hazardous waste will fund its collection only as much as they have to, and the disposal of those wastes can take place only to the extent that the regulations allow."

The study covers the four major types of hazardous waste: liquid, solid and chemical wastes; air pollution; wastewater and water pollution; and nuclear wastes. There are several parallels applicable to the field as a

• The industry is relatively new. Most participants didn't enter it directly, but were in some related operations and diversified into

 Market growth is entirely dependent on government legislation and regulation

· Industry participants (ace high liabilities and risk extensive litigation fees and

· Entry is difficult, usually requiring large capital investments, special technologies, and legal expertise in complying with governmental regulations and controls. As a result, few new companies are emerging, and

Continued on Page 19

# **Faces Scruntiny** In New Congress

Pharmaceutical industry executives should be "ready to testify" next year because the Democratic-controlled 100th Congress "will be much more active with hearings," says Sen. Dan Quayle (R-Ind.).

Sen. Quayle, a member of the Senate Labor Human Resources Committee, told a Food & Drug Law Institute meeting in Washington that "anytime there is a media report of a problem, you should expect one or a series of arings.

Although the health issues panel is likely to be more active under the chairmanship of Sen. Edward Kennedy (D-Mass.), than it was under his predecessor, Sen. Orrin Hatch (R-Utah), he said the coming changes should not

"It is more a style of leadership that has changed," remarked Sen. Quayle. "It will still take strong bipartisan support to pass legislation."

He said a number of unresolved pharmaceutical industry issues left over from the previous Congress will be revisited, including process patents, drug diversion, "real and perceived problems," in the biotechnology field and FDA resources and user fees.

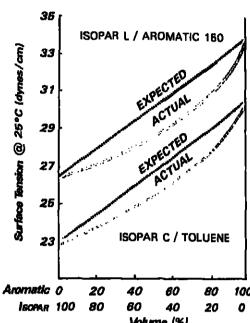
Sen. Quayle said he doubts that any "serious" major reform legislation affecting pharmaceuticals will be passed, but predicts 'great potential' for bipartisan action on other drug industry matters:

December 22, 1986 GHEMICAL MARKETENG REPORTER B

# Need to squeeze more from surfactants?

# Look to Exxon for SOLV/ABILITY.

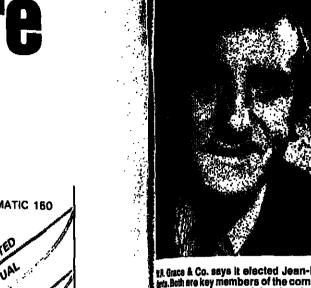
If the cost of surfactants is pinching your formulation budget, try the Exxon family of ISOPAR® solvents. Their low surface tension characteristics will help make your surfactants go farther, and will show you why Exxon has the solvents with the ability to solve your problems. We call it SOLV/ABILITY. For information about the quality solvents you can count on, call toll free 1-800-44-EXXON.



ISOPAR SOLVENTS DECREASE SURFACE TENSION









Grace & Co. says it elected Jean-Louis Greze and Fred Lempereur as corporate vice-presito Both are key members of the company's Industrial Chemicals Group and share resp rinte's European specialty chemical business. Mr. Greze serves as president of the group's my bysion, headquartered in Lausanne, Switzerland, and Mr. Lempereur is president of its chick Products Divison, headquartered in Paris.

# **EPA Enforcement Moves Set** Records During 1986 Year

Environmental Protection Agency tions under Federal hazardous waste laws. ays 1986 was a record year in the numbrofenforcement cases developed, referred to the Justice Department and

At the same time, the agency announced iresilts of an inspection and enforcement diviover the last year against certain haz-tions waste storage and disposal facilities. We have significantly increased our enmement efforts to put the regulated comcally on notice that violations of the naats environmental laws will not be aled," says EPA administrator Lee M.

EPA shares with the states environmencompliance and enforcement responsibilas," miles Mr. Thomas. "The combined idral and state enforcement actions are at addine high. As a result of our efforts, the cion's environmental compliance and en-Rement program is dynamic and healthy. नेश्री measures the program is moving for-

h fiscal year 1986, the agency reforred Madicial cases to the Justice Department, "apared with 276 last year. Cases involving Atlons of the Federal clean air and water th accounted for over 200 of these referover 80 case referrals involved yiela-

The states referred 543 cases to state courts · compared with 513 referrals last year. The Department of Justice filed 245 cases

in 1986 which were referred by EPA. The year before, Justice filed 241 cases.

EPA's 10 regional offices developed and referred to EPA headquarters or directly to the Justice Department a record 386 cases, up from 323 cases last year and 93 cases in

The agency also referred 45 criminal cases to the Justice Department this year, compared with 36 referrals last year. Criminal charges were filed against 94 defendants, which includes some from cases referred by other Federal agencies for violations of envionmental laws. The year before, 40 such charges were filed and 123 in all previous

Sixty-seven defendants were convicted or entered guilty pleas this year, compared with 37 last year and 109 in all previous years

Federal judges imposed fines totalling \$1.9 million against environmental criminals and orison sentences of 124 years, of which over 31 years will be served (the remaining years

# Monsanto Links Biotech With Agriculture's Survival A Monsanto Company executive last of the modern "precision farmer" is an em-

tet orged American farmers to use indic engineering and other new techhighes to increase their productivity

diressing the Conference on Technology dispiculture in Washington, D.C., Howard man, senior vice-president for act and development at Monsanto, said inglight products must be developed ingrican agriculture is to retain its doauction must be controlled ik markets and expand its foreign sales.

Our emphasis for several decades was in saling of production—yield—with much althought given to efficiency of production. he said. But the new trend is toward sion agriculture.' More and more sucdifarmers will aggressively adopt new dologies to reduce the real costs of pro-

pointed to fertilizer as one of the s input costs for farmers, noting that on and enhance yields, thereby lowering for chemicals and fertilizers. He We may also see the application of engineered root-colonizing and s to provide part of the fertilizer Mr. Schneiderman said another trend Salaring million

phasis on crop quality.

To compete effectively with mass produc-

tion in less developed countries, American farmers will want to differentiate their products through superior quality, he said. Mr. Schneiderman said biotechnology will enable farmers to grow crops with higher protein content and better milling and baking quali-

noted that biotechnology will eventually yield crops that have been genetically engineered with natural defenses against pests and diseases.

New generations of microbial crop protection products and enhancers of production efficiency will provide the "ultimate in enviropmental friendliness," because they utilize natural protection, he said.

Mr. Schneiderman called for innovative new partnerships between research universities, industry and government to endure the rapid application of new science to agricul-

The Conference on Technology and Agricultural Policy is sponsored by the Board of Agriculture of the National Research Council, the Kennetly School of Government at Harvard University, the National Center for Food Agricultural Policy and Resources. Food and Agricultural Policy, and Resources for the Future.

# Fructose Field Shifts **As Staley Expands**

stepped up to unprecedented levels. A.E. Staley Manufacturing Company has announced production plans for a line of crystalline fructose sweeteners called "Crystar" at its existing high fructose corn syrup plant in Lafayette, Ind.

Eventual production could rise to 100 million pounds per year. Production is scheduled to begin about June 1, 1987.
Questioned about production figures a Sta-

ley spokesman says: "We have developed a unique technology which gives us this production capability." The spokesman indicates plans to offer the product at about 35 to 60 cents per pound. Fructose currently sells tween 75 and 90 cents per pound. Currently, US consumption of fructose is estimated at 10 to 20 million pounds per year.

In the past, the health food industry and also pharmaceutical companies have been the biggest consumers of fructose. But as the aley spokesman explains, in addition to the traditional health food market, the company will also consider new markets for the product. As examples, he mentions baked goods and cereals. At this time, these mar-

"To develop a larger market," says the spokesman for Staley, "means we need to be competitive in the general food industry." For the future, he sees partial replacement

domestic production of fructose will be "all-natural" implications. As Melvin Wolkof sucrose with fructose in many different

Fructose is preferred in the health food



company's headquarters in Ludwigshaten, West Germany. He is currently president of the Fibers Division of BASF Corporation and execu-tive vice-president of BASF Corporation.

# **Ceramic Product Shipments** To Triple in Next Ten Years

ucts in the US will approach \$2 billion in 1987 and by 1995 the market will exceed \$6 billion; according to a new research report from International Resource Development Inc., Norwalk, Conn. - based market research firm.

US vendors in several segments have been 'taken to the mat" by Japanese competitors, the company says, but adds that it sees "some interesting niches" in which domestic vendors would likely survive and prosper.

On the whole, the outlook for advanced ceramics in the US is favorable, but growth will depend on how well managers respond to competition from the Japanese and their current work dominance of many advanced ceramics markets, says Jean Buffham, a mem-ber of the IRD research team that compiled

Shipments of advanced ceramic products

Shipments of advanced ceramic prod-cts in the US will approach \$2 billion in nearly \$1.5 billion in 1985. Most of this growth was generated through increased demand for electronic products, most notably

integrated circuits and ceramic capacitors. Electronic components will continue to lead growth in shipments, but starting in the late 1980's mechanical applications, particularly heat engine components, will play a more significant role in market growth, IRD

The report finds that between 1990 and 1995, the value of domestic advanced ceramic shipments is expected to nearly double, led again by the demand for electronic aponents and even more rapid growth in heat engine ceramic applications.

In the field of electronic componentry, advanced ceramic materials are often out-performed and under-priced by their plastic counterparts, but it's felt an end to this plas-

Continued on Page 21

# Formaldehyde Record Reopened **By OSHA for Public Comment**

Occupational Safety & Health Adminproposed revision of its formaldehyde sure to formaldehyde.

Under its December 1985 proposal, OSHA standard to include new information and allow the oppos ment on the new information.

The information concerns epider studies of persons exposed to formaldehyde, additional data on employee exposure to formaldehyde in the foundry industry, and other feasibility-related issues.

"We believe full consideration must be given to studies and data which became available after the formaldehyde record was closed last August but which are relevant to key issues raised during public hearings on the proposal," says assistant secretary of Labor for OSHA John A. Pendergrass.

"Public interest dictates that we not only consider this new information but that the public have an opportunity to comment on

He stresses, however, that the limited reopening of the record for 30 days will not

alter OSHA's September 1987 target date for istration has reopened the record on the issuing a final standard to limit worker expo-

is considering two regulatory alternatives: either a comprehensive standard if evidence points to formaldehyde as a human carcinogen; or a simple amendment to the current permissible exposure level (3 parts of formaldehyde per million parts of air averaged over eight hours) if the record indicates that the primary health concern is mucous membrane irritation and sensitization.

In either case, the proposal would lower the permissible exposure level to 1.0 or 1.5 ppm for the estimated 535,000 workers exposed above the 0.5 ppm level.

The new information includes: A resnalysis of a National Cancer Institute study on "Mortality Among Industrial

Workers Exposed to Formaldehyde" by T.D. Sterling and J. J. Weinkam. • Two reports on formaldehyde and can

Continued on Page 21

December 32, 1986 CHEMICAL MARKETING REPORTER



# News Capsule

## Montedison to Acquire

Montedison SpA is expected to acquire indibioticos of Spain at a cost of as much a \$200 million. The Spanish company with annual sales of some \$145 million. moduces pharmaceutical intermediates and is active in antibiotics research.

### J.T. Baker Sale Fails

Ashland Oil Inc. said Friday (December 19) that negotiations with Richardson Vicks Inc. concerning the purchase by Adland of J.T. Baker Chemical Company brebeen terminated. Ashland said it had ben advised that Richardson-Vicks deided to discontinue efforts to sell J.T.

### Jordan Expansion

Jordan Chemical Company has comdeted additions to its specialty surfacunis plant at Foleroft, Pa., as part of an ogoing expansion program. A new highmisure reactor, dedicated to production d "Jordapon" CI (sodium cocyl isethion newill increase production of that surixiant by 50 percent. A second reactor saltaise capacity for the company's line i sufactants (alkanolamides, betaines adsultaines, quaternaries and armine ox-Mes) by more than 10 million pounds, the

### EP Unit on Line

Exxon Chemical's affiliate in France Scabu (Societe du Caoutchouc Butyl SA). a completed a 30 percent expansion o sethylene-propylene rubber plant at Votre-Dame-de-Gravenchon to 65,000 nedric tons per year. Exxon has addi-east EP rubber capacity of 70,000 tons Ayear at Baton Rouge, La.

### firope's insurance Woes

European chemical producers are coning establishment of a re-insurance क्ष्म as a way of easing the insurance bility erisis over there. Details of the I'm have not been disclosed but it is wght to involve a pooled system that adserve as a cover for insurance comals with chemical industry policies.

# <sup>Nes</sup>tvaco Slates Plant

Restraco Corporation, a producer o per packaging and chemical products usto construct a new rosin size facility 48 Charleston, S.C., oleochemicals ा The new facility will allow the com-<sup>ayto</sup>substantially increase the produc capacity of its size products, accord

# |C| to Sell Assets

Imperial Chemical Industries Ple. ha iped to sell its oil and gas assets to Eurprise Oil Pic. in return for a 25 perat stake in the UK firm. Under the Greenent, ICI will receive 71.9 million (ca) issued Enterprise shares for its en-

# <sup>Du Pont</sup> 'Vespel' Plant

El du Pont de Nemours & Co. plans to aldanew plant to manufacture "Vespel" Mymlde parts in Mechelen, Belgium meet growing demand for high-perin April 1987. A similar plant in <sup>200</sup>omiya, Japan, opened in 1984. Du <sup>10</sup>ott expects European demand for <sup>1</sup>eans. parts to double by the early

# MC Unit Acquires

Mc Corporation says its Spanish subal sodium sulfate business of Barcelona hied Union Salinera De Espana SA is have not been disclosed. FMC says acquisition complements Foret's age of chemicals.

# Phosphoric Probe Is Extended by US

The US International Trade Commis-tion voted December 16 to allow the conthurstion of the investigation of dumping and subsidy charges filed by FMC and Alonsanto regarding phosphoric acid produced in Belgium by Societe Chimique Prayon-Rupel SA and sold in the US by its exclusive chemical sales agent Nitron Chemicals Corporation of Greenwich, 'onn. Prayon and Nitron's response was

"We're disappointed, but not surprised. This vote is only a first-step decision to proceed that in no way suggests the final outcome of a full study of the facts.

"We're encouraged that the chairman and vice-chairman (of the commission) voted against any further proceedings. We plan to cooperate with the commission and Department of Commerce, to defend ourselves successfully and to stay in the US as a responsible competitor.

The companies say success in this market is due to an advanced process that is more competitive than the thermalprocess still used by US producers.

# Kaiser Agrees To Arrangement With Alan Clore

Kaiser Aluminum & Chemical Corporation, Oakland, Calif., said that its Shamrock common stock, 1.3 units for each board had unanimously approved a definitive agreement with Alan Clore, a stock and 2.75 units for each Diamond Sham-British investor and Kaiser Aluminum's largest stockholder, that implements the plan to form a holding company that was announced three weeks ago.

The plan is subject to consents by lenders and approval of shareholders of Kaiser at a meeting to be held early next year, after receipt of proxy materials.

The plan includes the creation of a new holding company, an infusion of \$140-million of new equity by an entity controlled by Mr. Clore, certain protection for non-Clore group stockholders and a continuation of present Kaiser Aluminum management.

Mr. Clore and Guy de Chabaneix, senior vice-president of Mosely Securities Corporation, have been elected directors of Kaiser Aluminum & Chemical, and Mr. de Chabaneix has been elected to the board's execu-

# SmithKline Aims At 10 Percent Rate of Growth

SmithKline Beckman Corporation, is aiming for annual growth of operating profits of 10 percent year or better over the rest of this decade, Henry Wendt, president and chief executive officer, told a meeting with analysts in Philadelphia last week.

The company is projecting this year's sales at \$3.7 billion, a level supported by a brisk rate of sales and carnings growth in the fourth quarter, Mr. Wendt said.

The SmithKline CEO noted that a portfolio of cardiovascular drugs being developed in conjunction with an agreement with Boehringer Mannheim Pharmac poration should reach the market in Europe

SmithKline Beckman will have the responsibility for development, registration and marketing of these compounds in the US and Canada.

George Ebright, SmithKline's chief operating officer, noted that "Contac," which has withdrawn from the market following a tampering incident in March, has more than recovered its market share and is again the largest selling cold and allergy product in the US, with growth at more than 10 percent

# Diamond Shamrock Rejects Mesa Proposal

of Mesa Limited Partnership, said late last week that he was dropping his \$2 billion bid to acquire Diamond Shamrock.

"We made a fair offer, and the Diamond Shanarock board turned us down," Mr. Pickens said in a statement. "They have adopted the standard approch of entrenched management: hire invesment bankers and lawyers, reject and suc."

In voting to reject the acquisition proposal by Mesa Limited Partnership, Diamond's directors cited doubts about the value of the partnership units that Mesa offered to exchange for Diamond Shannock's common

Mesa Limited Partnership is an oil exploration and production company formed by Mesa Petroleum Company, Amarillo, Tex. both of which are controlled by T. Boone Pickens, Jr., the oil industry raider who has previously attempted to acquire Cities Service Company and Unocal Corporation.

Diamond Shamrock's board said the offer was inadequate and that board members had specific concerns about the offer, "including the ability of Mesa to continue to make eash distributions to Mesa unit holders, the uncertain value of the units and the taxable transaction facing shareholders."
Mesa's proposal called for the exchange of

one Mesa unit for each share of Diamond share of Diamond Shamrock \$2.07 preferred rock \$4.00 preferred stock. It is one of the few merger proposals in which no cash at all is

In rejecting the proposal, Diamond Sham-

T. Boone Pickens Jr., general partner rock alleged that a recent Mesa filing with Securities & Exchange Commission shows that Mesa's cash flow from operations on an annualized basis was insufficient to fund its existing \$2.00 annual eash dividend.

Diamond Shamrock argued that the uncertainties about whether the dividend can be sustained directly affect the long-term value of the Mesa units since a decline in the dividend would result in a decline in the market price of the units.

Also, Diamond Shamrock claimed that the extremely complex Mesa proposal could take as many as two years to implement fully, which would make it even more difficult to project the consequences for Diamond Shanrock and its shareholders.

Another great drawback of the proposal, the company's directors stated, is that while it offerd no cash to stockholders, many stockholders would face a tax liability to be paid out of their own tunds. This, they added, would lead to selling of shares on the market to raise funds to pay the tax, with the result that the market price of the units would be subject to downward pressure.

Diamond Shannrock also told its shareholders that because of the way these narrherships function, unit holders have rights equivalent to those of stockholders in ordinary

According to Diamond Shamcock, unit holders would have practically no voting rights. Also, the partnership does not hold annual meetings, and the unit holders do not elect aboard of directors.

According to Diamond Shatorock's letter to shareholders, Mr. Pickens would receive approximately \$82 million it Mesa had acquired Diamond Shaurrock

Cyanuric acid, a pool chemical, shows promise in a process under development to virtually eliminate nitrogen oxide emissions from diesel engines and coalburning power plants.

Heretofore, cyanuric acid has been known for its use as a stabilizer for chlorine in swimming pools, but the chemical is now viewed as a possible solution to such environmental ills as smog and acid

The process, developed by scientists at Sandia National Laboratories in Livermore, Calif., uses eyanuric acid to convert nitrogen oxide into water, nitrogen and other gases, according to published re-

ports Monsanto Company, which produces cyanurie acid, has been supplying the chemical to the Sandia scientists but has not been involved in any of the development work, according to a company spokesman in St. Louis, Mo.

Sandia operate: the Lavermore Combustion Research Facility, where the experiments are being conducted, for the Department of Energy.

The energy dopartment owns the patent to any technologies developed at DOEfunded facilities.

The eyamuric acid process was disclosed in the journal Nature by Sandia scientists Robert A. Pery and Dennis L.

# **Hoechst Merger Bid** For Celanese Delayed

American Hoechst Corporation has because much of it has to be translated from received a request from Federal Trade Commission for additional materials in connection with its scheduled acquisiion of Celanese Corporation.

The company has again extended the expiration date of the tender by its wholly-owned subsidiary Hostachem Acquisition Incorporated for Celanese shares.

American Hoechst, a subsidiary of FTC for information pursuant to the Hart-Scott-Rodino Antitrust Improvements Act.

that further information is needed from version, American Hoechst before the FTC will consider American Hoechst in substantial compliance with the request.

American Hoechst continues to supply such information, most of it from various foreign affiliates of American Hoechst. The Hoechst's vast operations outside the US, but ordinated debentures due 1990.

German and other languages into English.

As extended, the offer for all of Celanese's outstanding common stock, convertible preference stock and 7 percent second preferred stock will expire at 5 p.m. eastern standard time tomorrow. December 23, unless it has been further extended.

American Hoechst said that it has been advised by the depositary that as of 5 p.m. EST on Monday, December 15, approxi-Hoechst AG, headquartered in Somerville, mately 10,616,396 shares of common stock. N.J., said it had already supplied voluminous 13,038 shares of convertible preference stock a second request by and 20,027 shares of 7 percent second preferred stock of Celanese had been validiv tendered. The numbers assume conversion of The staff of FTC, however, determined all convertible debentures submitted for con-

These include 1.511.593 shares of common stock, 122 shares of convertible preference stock and 185 shares of 7 percent second preferred stock tendered pursuant to notices of guaranteed delivery.

By notice dated November 17, Celanese procedure has been drawn out not only by the has called for redemption on December 18 all amount of information needed to cover of its outstanding 4 percent convertible sub-

December 22, 1986

# Who's making news in fatty acids and glycerine?

Why, Procter & Gamble is! Take our new, multimilliondollar Quincy plant, near Boston. This fractionated fatty-acid facility will begin producing a multipleproduct line this year.

We also continue to take a leadership role in supplying high-quality glycerine. Today we have refining facilities at five locations in North America, to meet your needs for a variety of end uses.

But fatty acids and glycerine are only two examples of P&G's heightened fatty-chemicals activity. At our state-of-the-art plant in Sacramento, Calif., alcohol-processing technology has taken a giant step forward, and production capacity has doubled.

As a result, we are able to supply ever-increasing quantities of even higher-quality ethoxylates, methyl esters and straight-chain fatty alcohols. What's more, Sacramento's advanced technology

has led to the production here of high-purity, heavycut alcohols.

In fact—with facilities from Hamilton, Ont. to Dallas, Tex., and from Baltimore, Md. to Long Beach. Calif.—our capacity to produce a full line of naturally derived chemicals may well be North America's largest.

The chemicals user who calls us first, seldom needs to make a second call!

More proof that P&G has the plants, the people and the commitment to be your long-term source of a full line of naturally derived chemicals, including glycerine, fatty acids, methyl esters and fatty alcohols.

Procter & Gamble Industrial Chemicals Division. Box 599, Cincinnati, OH 45201. In Ohio, call collect: (513) 983-5607. Elsewhere, call toll-free: 800-543-1580.

**P&G Industrial Chemicals** Helping you boost product performance.



# OILS, FATS & WAXES

# Coconut Oil Prices Advance, But Buyers Keep to Sidelines

falling as consistently high price levels are keeping consumers away from the market. Instead, buyers are turning inmessingly to less expensive competing olly particularly soybean and palm.

the lack of interest in coconut oil has now gaten to the point where some buyers are beginning to sell off their forward positions alayer of the more cheaply priced oils, acording to an industry source.
"I don't know how widespread the re-sell-

ingisatible point," says the source, "but it's dearthat buyers are staying away from coomtoll." He says that there are some applicutions that people are still buying for, but he public a lack of volume in new business in

The price had been expected to ease off by tistime but some traders were instead surused to see it hold at these levels. It had kenthought that the approach of the holiday seson in the Philippines would prompt injusting in the Philippines would prompt injusting in the Philippines would prompt in t taishthe year's selling before upcoming hol-

lary market observers expected this to cour if buyers did not come back into the miket Instead, prices have remained dong even in the face of low consumer

The market experienced some strengthengerly last week after a spate of trading in trope Most of the buying and selling was in ਏ ਗਿਆ of dealer-to-dealer paper trading, Rording to industry sources. "There was Hagreat amount of trading, but enough to ing the price up," says a trader.

OTHER FIRMING INFLUENCES Also acting as a firming influence in the arket in the last couple of weeks were re-

ruthat an origin dealer/product was havidficulty covering his sales.
Seculation on the extent of the difficulty

is sid to be exerting upward pressure on wice, although, according to one source, while has been resolved by the rededuling of shipment dates.

he in willingness of consumers to buy co-cated is heightened by the plentiful sup-3 Stocks in the US as of November 1 were 5,000 metric tons, down slightly from the points month's figure of 139,700 tons, acening to Bureau of Census statistics.

Both of these supply figures are up significally from those of the previous year. As of weather 1, 1985 US coconut oil stocks were 1300 tons; at the beginning of October 13th stood at 59,000 tons. The difference ween the figures is attributed to increased

# FRIDAY SPOT PRICES

MARKET CLOSE DEC. 19, 1986

# RUDE VEGETABLE OILS

Consult of Pacific	.201/2
Cored, Midwest. ib.	NA
Colorseed oil, Valley	0014
Walley	.ZZY4
Minneys III.	.18
Pimel, NY, Minnespoils	25
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	.10
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hand oil, Southeast (restricted)ib. Spean oil, Decatur	1414

# REFD. VEGETABLE OILS

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bein saled of, NY	·
The day	•

id extracted, 34% bulk, Fargo ton 4,50% bulk, 85, Alabama	\$160
t,50% bulk, 85, Alabama ton an, unrest, 44% bulk, Debatu	\$110
in wrest, 44% bulk, December	\$175
Dulk, Danetus con	

# ATS& GREASES

vellow maximum 10%, ffa tanka ib13 46, bulk lanka, divd., Chicago ib11% 26, bulk lanka, divd., Chicago ib144
e, bulk tanks, divel. Chinage ib 1114
sedike, fancy, tanka, divd., Chicago . ib 1442 sedike, fancy, tanka, divd., NY ib 1442 sedike, bioh., tanka, divd., NY ib 1442

# Consumption of coconut oil in the US is production in the Philippines this year.

Current coconut oil stocks in the US should be sufficient to carry through the first quarter of 1987, according to a trader.

In the meantime, very few new orders for coconut oil are being placed, sources say, and competing soybean and palm oils are priced as much as 5 cents per pound cheaper in the US than coconut oil, making it appear un-

## PRICES TRENDLINES

WEEK ENDING DEC. 19, 1986

### CHANGES/UP

Corn oil, Midwest, 1c, per pound Lard, loose, bulk tanks, Chicago divd, 1/sc. per ib. Tallow, inedible, bleach, tanks, divd. NY, 1/sc. per ib.

### CHANGES/DOWN

Coconut oil, NY, 1/2c. per lb. Cottonseed, 41% bulk, Memphis, \$5 per ton Peanut olf, Southeast (restricted), 1½c, per lb Soybean, 44% bulk, Decatur, \$10 per ton Soybean olf, Decatur, .37c, per lb.

### OILS, FATS INDEX

The Oils, Fats & Waxes index reflects the prices of 11 representative materials in this sector and the quantity of each

	Che	mical i	Prices Start on Page	28
Dec.	20,	1985		. 90.66
			***************************************	
Dec.	19,	1986		. 80.00
		d in 19		

likely that consumer interest will be making a big comeback in the near future.

### VEGETABLE OILS

LINSEED OIL - A seasonal slowdown has the linseed oil market looking forward to increased activity in the upcoming year. The price is currently holding steady at 25c. per pound in bulk, f.o.b. from Minnesota.

The market is very quiet because of the slackening production of oil-based paints. Some of the seasonal loss in business had been picked up by printing and hardboard users, but a source says that is grinding down as well. "A lot of plants close for the holiday." he says. "After the first of the year they start gearing up and increasing their inventories."

The new year is also expected to usher in a high crushing rate with the increased production of oil-based paints. Sources note that the delayed harvest earlier this year had no lasting effect. Most of the flaxseed is in processor or company hands and won't be marketed until after January first.

SAFFLOWERSEED OIL - The safflowerseed oil market is still recovering from the heavy rainfall which caused premature sprouting of at least 50 percent of the Mon-

As a result of early sprouting, there has been less yield with a poorer grade of oil produced. There have been some complaints about the dark shade of the oil, a typical result of the damage done to the seed. The and varnish producers who need a lighter color to blend with their formulas.

The price of the oil is expected to increase as the supply diminishes, leading some suppliers to hold onto their materials.

A source in North Dakota reports that 15 percent of the safflowerseed crop there was

damaged from rains.

The current price of safflowerseed oil in non-breakable tanks in New York is 50c. per pound and 78c; to 80c. per pound for edible material in drums, New York delivered. SOYBEAN OIL - Exorbitant crushing

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# OILS, FATS & WAXES

rates have caused an excess of soybean oil, bringing a downward trend in the market. A comparison of the crushing rates in November 1985 (82.8 million bushels) to those of November 1986 (95.1 million bushels) shows an increase of 12.3 million bushels. Late last week the Chicago Board of Trade reported a

price close to 14 % c. per pound.

The extensive crushing is due largely to a high demand for meal, which is causing an abundance of oil to flood the market. "We had

low stocks in September and now we in producing far more than we need," single

The lack of buying from India has combuted to the downswing. Since their crop is in season they have not been importing maler als. Recently, however, they did buy some rapeseed from Canada and some pain of

rapeseed from Canada and some pain of from Southeast Asia, causing prices to rise.

Current export demand is largely me by cheaper oils coming out of Malaysia, we have a residual supply of vegetable oils. notes an industry source, "we can't compele in the world market."

The future of the soy oil market is uncertain at this point. "If the Malaysian crops small, as it has been rumored, the price could go up," says a source.

### WAXES

MONTAN WAX - The price of crode montan wax imported from Germany is quoted between 56 1/2 c. and 62c. per pond and is holding steady. The Californian varicty is also steady at 61c. per pound for his shipped by carload or truckload fol. his ping point.

According to a source, the demand for Californian montan wax is up 5 percent and holding steady. "We are optimistic that the upward trend will continue; there are good sales in the carbon industry."

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# AROMATIC ORGANICS

# TDI Price Advance Holding As Market Demand Picks Up

Producers of toluene di-isocyanate ing going on in home mortgages,"home furnishings and housing-related demand could be healthy next year. what healthy demand and reasonably supplies give them confidence that tel cent per-pound December 1 indus-

by wide price hike will stick. The price increase is firm, and the marinemales tight," says one producer. There ns no pre-buying activity, he asserts, be-658 material was not available."

Another producer observes, similarly, that 'n prebuying was allowed." Buyers were initelotaking 100 percent of their average southly volume, he says and there has been 'wresistance" to the price move.

ATDI purchaser in the foam industry conthis that "I think the increase will stick, (m) (bai) we will pass it through." He atinhies the likelihood of success to stronger Grand than in the early months of the year ங்ளுக்காயிகா price initiative failed.

Another foam industry source observes tithe earlier price increase began to erode most immediately, as major suppliers un-(scaleschother's pricing. That has not been the serly weeks of this initiative.

Producers say that firm toluene costs, two not the major reason for their price imase, have provided some support. Ming toluene values were cited as conwhiting to the difficulty with raising prices udier in the year.

COSTS REPORTED RISING

"Morelevant matters," according to one power, include "the cost to build and mainin facility, environmental expenses assowith running a plant today, and the invent of energy necessary" to operate. Producers say that, while domestic de-ां this year has only been about even with

iii,the second half of the year has been 3 to percent higher than the first half. he furniture and carpet underlay marids, which account for about 43 and 14 perand TDI demand, respectively, are said to

the been particularly strong since inidhis observed that this pickup in demand realis from a high rate of housing finishes Moving heavy housing starts in the Spring. Bost business in the fourth quarter from automotive industry is said to reflect itred inventory adjustment patterns. The Assortation market accounts for about 21

erent of consumption. reducers say the industry has been opering at a fairly high rate for the year. Esti-Merange from 92 to 95 percent of effecet capacity. "We've been running flat A and inventory has probably gone down write year," says one producer, noting that weeked any inventory" to sell off prior to

Inventories are very low," agrees another solver, saying that "we are probably in for light supply/demand situation" for the light supply/demand situation. that six months of 1987 on account of mains scheduled in the industry.

Ola Corporation says it will be down for Aveeks in the Spring prior to its 30-million-And per-year debottlenecking at Lake aries La. which should be in place by June. wo other producers are expected the maintenance downtime during the by half of the year. Dow Chemical USA Bl does not have a turnaround planned. says that the new capacity should be absorbed into the marketplace. A and any spokesman points out that, with the address in the industry in recent years, being sill be lower than during 1984.

History supply will be greater in the second

History supply will be greater in the second

Bears and the industry in recent years,

History supply will be greater in the second Another producer comments that, while it

and easy to predict the swings in the hous-branket, "I believe the continued drop in the mortgage rates will keep the housing bald alive into 1987. In addition, he says a lyou take into account all the refinanc-

TDI exports have been running at a strong clip this year, eclipsing last year's rate by 18 percent, and moving at fairly high prices, producers say. Major markets are Canada, Brazil, the Dominican Republic, Germany,

It is noted that Brazil plans to increase its own production capabilities by mid-1988

## **PRICES TRENDLINES**

WEEK ENDING DEC. 19, 1986

CHANGES/UP

CHANGES/DOWN

# **AROMATICS INDEX**

The Aromatic Organics Index reflects the prices of 14 representative materials in this sector and the quantity of each produced in 1985.

p. 000000		
Dec. 19, 1986		167.84
	40140140114114411411	
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Chemical Prices Start on Page 28

through a debottlenecking project. This will cut US trade to Brazil in half, resulting in a loss of 14 million pounds per year of exports, says a producer.

ALKYLPHENOLS - Schenectady Chemicals, Inc. says it is raising market pricing on nonylphenol by 11/2c. per pound, effective January 15. Present market prices are said to be in the upper-30c.-per-pound range.

At the same time, market pricing on butylphenol will increase by 2c. per pound, and on octylphenol by 1 1/2c. per pound.

The company attributes the changes to a scheduled industry-wide 3c.-per-pound phe-nol price hike January 1. "It appears the crosion in phenol has stopped, and that we are on an upward trend, says a company

BISPHENOL-A — Aristech Chemicals Corporation and Dow Chemical USA say they are raising selling prices by 2c. per pound, effective January 1. Dow attributes the price move primarily to higher phenol costs.

Dow says it is continuing to invest money

in the bisphenol-A business. The company plans to introduce a granulated form to the market in the first quarter of 1987.

BTX — Major benzene producers, including Exxon Chemical Americas and Shell Chemical Company are raising contract pricing by 12c. per gallon, to \$1.10 per gallon, effective January 1.

At that time, contract pricing for most producers will have increased 23c. per gallon, since late November. Standard Oil Company s not yet announced a January 1 price.

The benzene spot market was quoted last week at \$1.07 per gallon, a 7c.-per-gallon rise from the previous week. "There is a perceived shortage of benzene," says one industry source, that stems from production problems experienced by major producers and strong derivatives demand.

"Nobody anticipated this" dramatic surge in pricing this month, says another source, but "there is not a lot of benzene around, and people want it."

It is observed that, while hydrodealkylation capacity has started up recently to meet the industry's needs, "it is a function of weeks and months" before large quantities of that material become available to the market. Spot toluene pricing was quoted last week at 75c, per gallon, a 6c, per gallon increase

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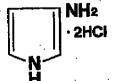
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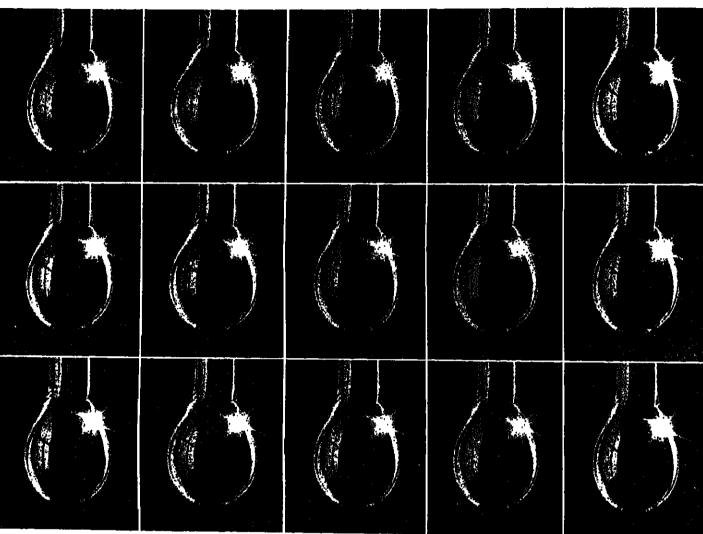
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CHEMICAL MARKETING REPORTER

December 22, 1986

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# **AROMATICS**

nating off-schedule prices for the new year, attemy year, analysts say. BASF's list pricing will remain ??c. per Publing up VCM costs in 1987 is an an-pound on molten and 30c. per pound on flate wared \$10 per ton chlorine price increase, .o.b. shipping point.

STYRENE — Producers are announced answerin January.
higher prices for January 1. Arco Chemical Rile it appears doubtful that ethylene Company says it is raising its pricing by k | result rally the full 2 cents, the prospect

Amoco Chemicals Company is increasing its list price to 30c. per pound less a 3c. per pound temporary voluntary allowance (Tiki from its previous price of 25c. per pound. Borg-Warner Chemicals reportedly it

moving its list price up to 32c. per poundles a 4c.-per-pound TVA from a level of १६८ हर

Chevron Chemical Company is raising its list price to 30c. per pound, with a 35c per pound TVA for major accounts.

Dow Chemical USA is increasing its list

price to 30c. per pound with a to per pound
TVA from a listing of 26c. per pound
Fina Oll & Chemical Co. has a current

posting of 30c.-per-pound, less a 4c-perpound TVA, and is evaluating the marketing

Huntsman Chemical Corporation's December price has been 25c.-per-pound less 2c.-per-pound TVA. Sterling Chemicals is increasing its is

# from the week before, reportedly total PHATIC ORGANICS the benzene movement. Xylene was holding it.

# the benzene movement. Xylene was holding steady on the spoints ket between 78c. and 80c. per gallon in the contract level this month is said to be will yell Chloride Prices Firm tween 76½c. and 77c. per gallon. NAPHTHALENE — A producer report is PVC Tabs, Costs Rise market price of 20c. per pound for contract is pricing in the industry is and chloride monomer prices are tight balance through next year to be slightly higher.

Aristoch's list pricing will remain unhanged at 30 ½c. per pound for moles changed at 30 ½c. per pound for molecular terial, f.o.b. shipping point, and 33 to per pound for flake, f.o.b. shipping point.

BASF Wyandotte Corporation says that through contract renegotiations, it is slimble through the contract renegotiations, it is slimble through the contract renegotiations, it is slimble through the contract renegotiations and the contract renegotiations are small through the contract renegotiations and the contract renegotiations are small through the contract renegotiations.

O.b. shipping point.

Another producer says that he has been produced say ethylene making some upward adjustments in pricing the making some upward adjustments in pricing of late, and one other producer says he will try to break out of the pricing support any upward movement in pricing a support any upward movement in pricing and it will push for 2 cents per pound price

per pound. The company's new list price its reasing costs for both feedstocks has ಜಜಂತ್ರಗ್ for merchant ethylene dichlomoducers to ask for one cent price in-Takes next month. Prices for EDC, the diincursor to vinyl chloride monomer, amently quoted at "just under 10 cents append" by one seller.

Mer peaking at 17 cents per pound this 72 vinylchloride prices slipped to a 1986 ad 15 cents during the Summer and have 'addigatly since then. Sources note that been firming trend in VCM prices has intentirely from PVC price hikes. RAW MATERIAL INCREASES

breases in raw material costs for VCM. 15Mychlorine, have not affected monomer Mr. A light supply-demand balance for Nall year has also had little impact on rog Together, though, the combination of THE TAY material costs and taut availabilolymonomer gives producers added im-

has annualized basis, demand for VCM Sterling Chemicals is increasing its is absence tremely close to capacity in 1986. price to 30c. per pound from 26c. per pound El Paso Products Co. is raising is its plant.

28c. per pound.

Producers say the price changes are driven by surging benzene costs. A significant price increase is necessary just to cant price increase is necessary just to maintain margins," one producer comment, maintain margins," one producer comment, "despecially since December has been fairly less two years. Production life in the past two years. Pro

fullermore, many analysts are project-ionid demand for domestic VCM markets Most observers say the building inwill remain strong next year, and estideall for PVC demand to match or bet-

ks year's consumption total.

bued demand for PVC, VCM producers Adherver says this strategy will result in Mable 150 million pound decline in net 1 tyports in 1987, from this year's 1.2

in now, domestic VCM capacity will reclose to the current 8.4 billion pound IPPC, Doward and Shell maintain large dVCM units on the Gulf Coast, but none of Mpanies plan to reopen capacity at this its Occidental Chemical, the largest legrated PVC maker in the country, its sourcing for VCM, the company does the doubt a VCM plant at this time. produces ethylene, chlorine, ethylene had eand PVC, but not VCM.

result, VCM supply figures to be in

to be slightly higher.

The market is described as major and is identified to firm in the new year in restable with, "if anything, slightly decrease to rising raw material costs and mothballs, and surfactants.

PHTHALIC ANHYDRIDE — Ariset for polyvinyl chloride phromator is at its peak. One source summarized market conditions by saying PVC producers "like it when VCM is tight, because it gives more support to the PVC market. That's why Oxy allowances on prices less than 26c perpond for molten material, f.o.b. shipping point.

Anticticals Corporation says that, effecting adbalance for VCM is also contribution. The company also will eliminate allowances on prices less than 26c perpond per pound for flake material, f.o.b. shipping point.

Anticticals is described as major and to firm in the new year in restriction in the year, when demand for monomer is at its peak. One source summarized market conditions by saying PVC producers "like it when VCM is tight, because it gives more support to the PVC market. That's why Oxy hasn't gotten its own (supply) of VCM."

ANTIFREEZE — Citing increased costs for production, distribution, and marketing, First Brands Corportion has announced a price increase of 25c. per gallon on antifreeze price increase of 25c. per gallon on antifreeze production, distribution, and marketing, First Brands Corportion has announced a price increase of 25c. per gallon on antifreeze production, distribution, and marketing, First Brands Corportion has announced a price increase of 25c. per gallon on antifreeze price increase of 25c. per gallon on antifreeze production, distribution, and marketing price increase of 25c. per gallon on antifreeze price increase of 25c. per

# PRICES TRENDLINES

WEEK ENDING DEC. 19, 1986

CHANGES/UP

# CHANGES/DOWN

### **ALIPHATICS INDEX**

The Allphatic Organics Index reflects the prices of 20 representative materials in this sector and the quantity of each produced in 1985.

Dec. 19.	1986	222.80
Dec. 12,	1986	222.80
Nov. 21.	1986	222.80
Dec. 20,	1985	222.80

Chemical Prices Start on Page 28

products effective with shipments on February 1, 1987. Included in this increase are PRESTONE II, private label product and bulk antifreeze.

BUTADIENE — The December market price for butadiene has made a notable increase over the levels seen a month ago. Analysts are currently placing prices in a range of 11c. to 12c. per pound. The increase is generally attributed to the progressive tightening scen in supply of the olefin, contributed to largely by the lack of imports into the US.

European producers reduced their exports, seeing it as uneconomical to export at the low price levels seen recently in the US, which bottomed out at 9c. per pound during November (CMR, 12/1/86, pg. 19).

Instead, European producers are said to be co-cracking at a growing rate, currently at about 30,000 tons per month, according to an

industry analyst.
Also contributing to the tightness in supply is the fact that US producers are relying more and more on propylene as a feedstock, which yields less butadiene than heavier

Current inventory levels stand at 137 million pounds as of the first of December, down lion pounds as of the first of December, down from November's beginning stocks of 159 million pounds, according to Tucker Consulting Services of Dewey, Okla. "The inventories are probably at their lowest in two years," says one analyst, who goes on to say that this is creating a situation conducive to the increase in price seen in the market this the increase in price seen in the market this

Although US steam crackers are running Although US steam crackers are furning at high capacity, "We never make as much as at high capacity, "We never make as much as at high capacity, "We never make as much as at high capacity, "We never make as much as at high capacity, "We never make as much as at high capacity, "We never make as much as a top of the company of the compa may begin to attract European exporters back to the US market.

POLYOLS - Olin Corporation has announced that it will increase its prices for "Poly-G" non-foam and rigid polyols by Sc. per pound. The price change is effective January 1, 1987 for non-contract customers and, for contract customers, on the first date permitted by the contract, Price changes are not to exceed current published list prices; all other terms of sale, including payment, remain unchanged.

The price increase follows an Olin increase one week earlier on flexible polyols. Mobay, Chemical Corporation and Dow Chemical also raised prices on both rigid and flexible polyols. The main reason for the increases is

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December 22, 1986

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December 22, 1986

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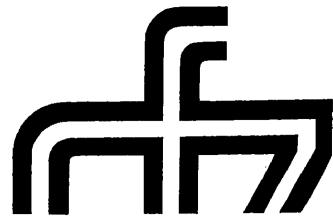
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December 22, 1986

# **ALIPHATICS**

said to be the rising price of propylene oxide, the primary raw material in polyol produc-

the primary raw material in polyol production.

PROPYLENE GLYCOL — Olin Corporation has announced an increase in its off-list pricing for its propylene glycol products. The price increase is to be effective January 1, 1987 for spot customers and according to terms for contract customers.

The price increase will be 2c. per pound, not to exceed current list prices, for industrial, USP, feed, dipropylene and polychill grades. Prices for the propylene glycols are f.o.b. Brandenburg, Ky. Olin's current list pricing for bulk material is as follows: 41c. per pound for industrial grade; 42c. per pound for industrial grade; 44 /ac. per pound for industrial grade; 44 /ac. per pound for feed grade; 44 /ac. per pound for feed grade; 44 /ac. per pound for industrial grade; 44 /ac. per pound for industrial grade; 42c. per pound for feed grade; 44 /ac. per pound for industrial grade; 42c. per pound for industrial grade; 42c. per pound for dipropylene.

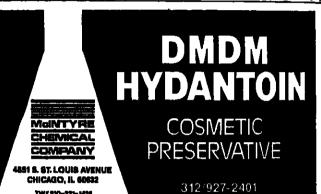
This price change comes on the heels of a similar announcement by Dow Chemical USA, which also raised prices by 2c. per pound for its propylene glycol products. The strengthening seen in the market lately is said to be the result of producers trying to regain some of the position lost. The price increase will be 2c. per pound for industrial grade; 41 /ac. per pound for industrial grade; 41 /ac. per pound for dipropylene.

This price change comes on the heels of a similar announcement by Dow Chemical USA, which also raised prices by 2c. per pound for its propylene glycol products. The strengthening seen in the market lately is said to be the result of producers trying to regain some of the position lost in the produce in the market lately is said to be the result of producers trying to regain some of the position lost in the value of the bids in the produce in the price increase will be 2c. per pound for industrial grade; 4c. per pound for dipropylene.

This price change comes on the heels of a similar announcement by

though, imports have dropped all, largely to changes in the value of the land the D-mark, says an industry we're looking for a modest adjusted rather than total recovery of the principal had been lost," says an industry spokent had been lost, says an industry spokent had been contract customers and according terms for contract customers.

\*\*Continued from Page 7\*



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holems for the product may arise from whithat fructose tends to pick up water raemosed to the atmosphere. But, as one gravesplains, the water-attracting quality types out to be a benefit in certain appliin the case of baked goods, fructose's ட்ர lo hold water may prevent certain restrom going stale.

sulv's only domestic competitor is town Xyrofin. This company manufacistration from dextrose solution at its 知in Thomston, Ill. In the American Xyincress sucrose solution is exposed to in enzymes, and the resulting dexdirectose mixture separated by means imatography. The remaining dextrose to is recycled for further conversion

YROFIN JOINT VENTURE

imily, American Xyrofin was a joint e of Finnish Sugar Company in Liki, Finland, and F. Hoffmann-La likin Switzerland. Hoffmann-La Roche la Nutley, N.J. has been in charge of US Multon for the product. Beginning Januoller, however, Finnsugar Biochemics beated in Schaumburg, Ill., a part of high Sugar Company, will assume comrepossibility for the sales of Xyrofin's

lording to a Roche spokesman, the comcontinue to supply its customers froctose for the balance of 1986 and te working closely with Finnsugar to

lugar recently changed its name from Blochemics, a firm specializing in ymes. George Harkins, head of spe-Westeners at Finnsugar, stresses his was determination to stay in the frucemrkel. We will meet the competition, En adding we have been at this for a climand we will stay in it."

Religeneral agreement in the industry tiese are interesting times" for fruc-asse source puts it. If indeed fructose respond reach the levels Staley has been still be willing to look at fructose as an

Notice to sucrose.

Notice present, fructose application has a maceutal areas and in the health food try. "If prices can be brought down" has source, "the common folk are will-like source." another source says, "fructose will

Find For 1985 the US consumption of ււսլու over sucrose. his a stimated at 14.8 billion pounds, his 4.5 billion from a decade ago.

lact that fructose is sweeter than All many applications comes into play, the same sweetness can be achieved

Continued from Page 7

the levels indicated by Staley.

Over the last three years, foreign imports of fructose have been growing steadily, despite an import tariff of over 15 percent. Japan especially has made considerable gains. In 1984 it brought a little over 500,000 pounds into the US; by 1985 the figure had grown to almost 2 million pounds.

To date this year, Japanese imports of fructose have exceeded the 2-million-pound mark. Other major importers are West Germany, which cut its imports from over 2 million pounds in 1984 to slightly over 1 mil-

# **PRICES TRENDLINES**

WEEK ENDING DEC. 19, 1986

CHANGES/UP

CHANGES/DOWN

**DRUGS INDEX** 

The Drugs & Fine Chemicals index reflects the prices of 10 representative materials in this sector and the quantity of each produced in 1985.

Chemical Prices Start on Page 28		
Dec.	20, 1985	211.16
Nov.	21, 1986	211.18
Dec.	12, 1986	211.16
Dec.	19, 1986	211.16
O. 04	on process in term.	

ion in 1985 and 1986. France imported 142,000 pounds in 1984, the figure grew to more than 1 million in 1985 and in 1986.

As one producer notes, foreign importers may find the US market a more difficult place to do business than in the past.

BARIUM CHLORIDE - Producers of high-purity barium chloride see a steady market for the coming year. A spokesman for J.T. Baker Company agrees, saying that their prices have not changed for some time. The company charges \$1.50 per pound for a technical grade and \$5.50 per pound for the reagent-grade material.

A spokesman for G. Frederick Smith, makers of ACS purity grade, used for analytical applications, reports prices ranging from \$5.02 per kilo to \$6.60 per kilo. There have been no price chagnes for more than one

"The market has been steady over the past several years" says a spokesman for Chemi-cal Products Corporation, Cartersville, Ga., the only US manufacturer of industrial-use barium chloride. "It is a mature market" says the representative adding that he foresays the representative adding that he fore-sees no price changes for the coming year. Prices reportedly dropped several years ago, due to the impact of Chinese imports on the market. There is agreement among industry sources that the market has been depressed ever since.

Prices are as follows: For the crystalline product, \$23.50 per hundred pounds, delivered, in 50-pound bags; for the anhydrous variety, \$29.50 per hundred pounds, delivered by \$29.50 per hundred pounds, delivered by \$29.50 per hundred by \$29.5

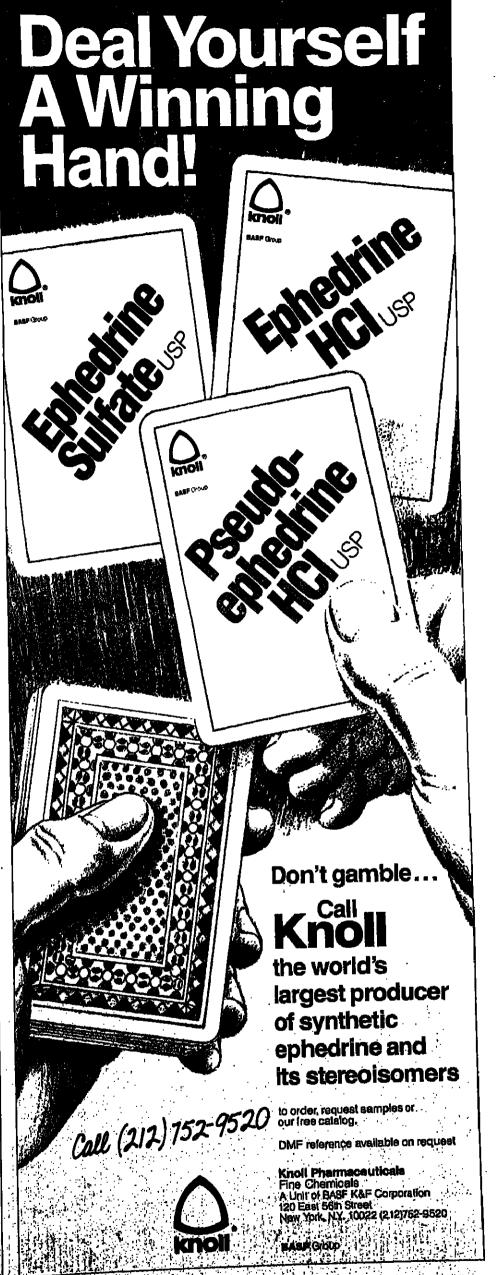
ered, in 500 pound drums. Some uses for barium chloride are as pigment and color in the textile industry, for blanc-fixe paper coating, and in the tanning

NORFLOXACIN - Merck Sharp & Dohme announced the marketing of a new anti-bacterial agent, "Noroxin," (norfloxacin) indicated for the treatment of urinary tract infections.

Noroxin is said to belong to a new class of anti-bacterial agents called fluoroquinolones with a broad spectrum of effectiveness and fewer side effects than commonly prescribed

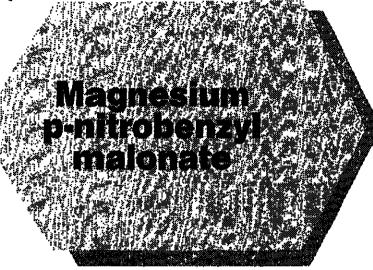
fewer side effects than commonly prescribed antibiotics. According to MSD, the product is antibiotics and in the first agent available specifically for urinary tract infections.

Other-drugs for the treatment of this discount is antibiotic marketed by Roche as cole, an antibiotic marketed by Roche as cole, and the collection of the last base. crose," might be willing to consider "Bactrim" and by Burrougha Wellcome. "Bactrim" and by Burrougha Wellcome. Company as "Septra."



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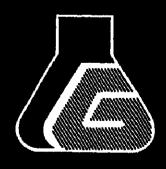
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CHEMICAL MARKETING REPORTER

# **Drug Patent Bill** Is Defended By Canadians

Canadian drug prices will not rise as a result of amendments to the Drug Patent Act and critics are irresponsible when they suggest prices will climb because of proposals to give patent protection to pharmaceutical manufacturers, says a Canadian government official.

Nothing we are doing will cause the rise in price of an existing drug or, for that matter, a future drug," Consumer Affairs Minister Harvie Andrew told a hearing of the House of Commons in Ottawa last week.

But Mr. Andre acknowledged that the proposed amendments would delay the decline n drug prices that is caused by competition with generic copies of brand-name drugs.

"There is no question that generic competition causes the price to come down," he said, noting that the bill would delay the introduction of generic competition for seven to 10 years. "This can be called potentially

The legislation under consideration would guarantee a drug manufacturer exclusive patent rights for seven years against a generic manufacturer who develops a copy in Canada, and for 10 years against a generic drug whose chemical components are im-

It would also provide the provinces \$100 million to compensate them for delays in under pressures routinely encounte introducing approximately 40 generic drugs within landfills.

The bill would also set up a Drug Prices Review Board for the purpose of protecting consumers from unjustified price increases.

Mr. Andre declared that the legislation would produce an increase of \$1.4 billion is research and development in Canada, based on a 13 percent growth rate in the Canadian drug market, and would directly create some 3,000 new jobs by 1995.

He also contended that the proposal would end an unfair system of permitting generic copies. "We will no longer be taking a free tide at the events of the e ride at the expense of the rest of the world," Mr. Andre remarked.

"Whether you develop a new camera, a new mousetrap or a new drug, you're entitled

often reduce health-care costs because the reduce hospitalization. The ulcer of OXIC Waste Spurring "Tagamet" had \$85 million a year in hospitality and \$135 million a year in hospitality and acquisitions abound throughout tion costs, he noted.

Mr. Andre told the committee the government had rejected a four-year patent in 1800/SVP reports that stricter enforcement had rejected a four-year patent in 1800/SVP reports that stricter enforcement had rejected a four-year patent in 1800/SVP reports that stricter enforcement had rejected a four-year patent in 1800/SVP reports that stricter enforcement from 1800/

# **EPA May Ban** Liquid Disposal straillon in 1983 to \$6.9 billion in 1986

Environmental Protection Agency is the ideal market for all types of air polluproposing a general ban on the disputation in 1983 to \$1.6 billion in 1986.

contamination from free-flowing liquids the segment is dominated by major sup-which are likely to be released a meal in General Electric, Combustion Engi-drums decay and collarse.

collapse of the landfill cover after the landfill has been closed. Some limited exemptions to the prohibition would apply, EPA says.

The agency is also proposing to prohibit along product industries.

The use of blodegradable materials used to be absorb, contained and the limit and the li

absorb containerized liquids. In additi EPA is proposing to require the use of liquids-release test to determine whether the waste/absorbent mixture will release liqui

EPA banned the disposal of bulk liquids hazardous-waste landfills in May 1985. Th agency will accept comments on the proposal for 60 days following publicationing Federal Register next year.

# Bioassay Lab Sale Fails to Go Through

Bioassasy's Woburn toxicology facility.

Bioussay is not negotiating with any othe potential purchaser for the Wobum facility. new mousetrap or a new drug, you're entitled osome period of exclusivity," he said.

Mr. Andre also pointed out that new drugs

Mr. Andre also pointed out that new drugs

# POTASSIUM IODIDE

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indemical wastes from \$6.8 billion in 10511.6 billion in 1992.

petrends that caused the private sector asse its spending in this sector from

hazardous-waste landfills.

The agency says such a ban would prove the presence of free-flow liquids in the last directed at public utilities, and this fills, thus reducing the risk of growning the presence of free-flow liquids in the last directed at public utilities, and this fills, thus reducing the risk of growning the last of \$2.6 billion by contamination.

Drum collapse could also trigger events and McDermott claimed a 56 per-

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### Continued from Page 5 is by far the slowest growing segment in the hazardous waste industry, due to low or nega-

tive rates of growth in the construction of new treatment facilities, the company says. However, for the next five to ten years, the market will be driven by a scarcity of quality water sources, and this provides an opportunity for producers of water-treatment chemicals, who should see their market expand from \$2.1 billion in 1986 to \$2.7 billion in

Disposing of nuclear waste is a problem of growing magnitude, and a political issue with which no one is dealing effectively. Congress has recently put off addressing the problem until the mid-1990's.

While there is national pressure to enforce control of radioactive wastes, local communities are against the location of a waste storage site near them, or transportation of hazardous wastes across their areas to dis-

Total costs for processing, packaging, transportation, and disposal amounted to \$312 million in 1986, and the market research firm predicts this figure will grow to \$490 million by 1992.

Despite the strong predictions of future growth, many companies that entered the hazardous waste management industry during the 1970's, anticipating considerable growth in product demand, have thus far been disappointed that legislative goals have

not been met by regulatory measures.
Profitability problems which were endemic in the early days of the industry have for the most part been alleviated by better technology, better management, and industry concentration. However, disagreement still exists over how much, and how fast pol lution should be abated, and this continues to cause regulatory indecision and inconsis-

# Chloralkalkali Unit

Continued from Page 5

mands as the reason behind the decision to increase production.

"Our ongoing commitment is to ensure that OxyChem will be able to meet the product needs of the customers we serve. This particular project is one way we will be able to demonstrate that commitment, comments Mr. Mears.

In addition to chlorine and caustic soda, the Taft plant produces sulfur monochloride, sodium chlorate and thionyl chloride.

Earlier this year, the corporation completed the installation of advanced technology membrane cells at the plant, an investment which it claims strengthened its position "as one of the lowest cost producers" of commodity chloralkall products in the United States.

The company also produces chlorine and caustic soda at eight other US plants, including its Convent, La., facility.

Occidental Chemical Corporation which

manages the chemical operations of Occidental Petroleum Corporation, claims to be the largest chlor-alkali merchant marketer in North America. Before Occidental acquired Diamond Shamrock's facilities PPG was generally considered the largest chloralkali merchant marketer.

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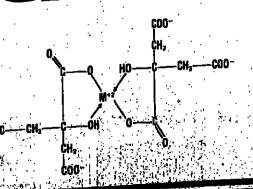
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**HEAVY & AG CHEMICALS** 

PRICES TRENDLINES

WEEK ENDING DEC. 19, 1986

CHANGES/UP

CHANGES/DOWN

**HEAVY & AG INDEX** 

of each produced in 1985.

Dec. 19, 1986

Dec. 12, 1986

Nov. 21, 1986

Dec. 20, 1985 ..

minds of producers.

product substitution.

less of duties.

buoy the producers.

FERTILIZER MATERIALS

The Heavy & Ag Chemicals index re

flects the prices of 18 representative

Chemical Prices Start on Page 28

tored into 1987 projections, but which the

# Soda Ash Picture Continued from Page 3

ity is scheduled to take another dip in early 1988 when Kerr-McGee completes the recently announced dismantling of

its Westend soda ash facility. Kerr-McGee says the shutdown will decrease the company's nameplate by 100,000

On the demand side of the equation, while producers have in recent years focused attention on strong export demand, 1986 do-

mestic demand was a highlight as well. According to Ignatious Gallow, a market researcher with Texasgulf Chemicals Company, 1986 US consumption of soda ash should reach 6.7 million tons, up about 1.5 percent from the previous year.

Producers note that the glass container business, which accounts for over 25 percent of soda ash consumption, has been surprisingly strong this year. While overall container glass production is said to be up somewhat, consumption of soda ash in this business is tempered by the fact that cullet glass is also consumed in container produc-

Mr. Gallow calculates that soda ash consumption in container glass is off 1 percent through August, as compared to the same period last year. He adds, however, that this compares to consumption declines ranging from 3 to 6 percent in previous years.

### CONTAINER GLASS STRENGTH

Soda ash makers say container glass is riding on the strength of the beer and wine as well as the specialty foods industries. Chesebrough Pond's, for instance, this year introduced a glass-jarred product called "Ragu Pasta Meals" which is said to have met with considerable success. Other companies such as Campbell Soup Company and American Home Products have developed their own rersions of the pasta dish.

In a similar vein, one producer notes that, in conjunction with the Glass Producer's Institute, Libby is promoting a line of single serving juices that come in glass containers.

Flat glass production for the auto and construction industries has also contributed to the banner year. Some fear, however, that high commercial vacancy rates and the new tax law may lead to a drop in construction in

Producer estimates of overall 1987 US soda ash demand are flat to down slightly. Overall demand should fare better, however, since the export market is expected by most to grow above 1986's record levels.

Export growth should be aided by the partnership General Chemical entered into with the Australian firm ACI International. Through the partnership, ACI purchased a 40 percent interest in General's Green River operations. Mike Stark, vice-president and general manager of soda ash for General says that ACI will take a portion of Green River soda ash, but that it will be soley for ACI's internal consumption and will not adversely affect the world price or the activities of ANSAC, the US soda ash export associ-

In addition to this export development, producers report that a synthetic soda ash acility in Switzerland is scheduled to close in the near future. While this particular shut down is not significant in itself, many producers feel it is indicative of a general trend in the European synthetic soda ash industry to reevaluate the economics of old facilities.

Another often-cited export issue is the question of Japan's receptivity to US soda ash. Mr. Stark notes that several events occurred this year that may contribute to Japan's becoming a larger buyer of Green River product.

The first such event, he says, was passage of US Senate Resolution 504 which requested a Presidential appeal against unfair INDUSTRIAL ACIDS commission has found Japanese Pair Trade Commission has found Japanese producers in violation of fair trade practices, but has taken no punative action. Ambassador Mike

# ENY CHEMICALS

at three locations, effective January ucontracts permit.

Marcand oleum prices will increase by Ingriton, 100 percent basis, for material Isperion, 100 percent dans, to inflate in fair from Grasselli, N.J., New Haven, and Hammond, Ind. New prices are proceed current schedule. Du Pont pro-

Mansfield is urging further Japanese action, US sodari and only at Grasselli, but operates Even without Japanese action, US sodari and only at Grasselli, but operates exports are expected to total 2.1 million for this year, an 8 percent increase over 1st adother Northeastern and Midwestern Most, although not all, producers expected for the Northeastern and Midwestern figure to increase in 1987, but by a south factor of the Committee of the Northeastern and Midwestern figure to increase in 1987, but by a south factor of the Committee of the Northeastern and Midwestern figure to increase in 1987, but by a south factor of the Committee of the Northeastern and Midwestern figure to increase in 1987, but by a south factor of the Committee of the Northeastern and Midwestern figure to increase in 1987, but by a south factor of the Committee of the Northeastern and Midwestern figure to increase in 1987, but by a south factor of the Northeastern and Midwestern factor of the Northeastern factor

Mary observers feel that the Midwest-the will need the support of similarly thered pricing for Canadian and dem smelter-derived product. Ac-'aloone, Southwest metal smelters are 2 some improvement in their present wallons, but will net "modest results,

hale acid shipped out of Du Pont's mosd, and General Chemical's Fort Lim terminals is smelter-derived. This Lighthat prices for recovered product in Lights may firm, provided Canada's ત્ત follows suit.

materials in this sector and the quantity was this Southeast prices for virgin sulmain stable and will not strengthen, . 113.69 ring to one observer, "for at least a . 113.69 ring to one observer, "for at least a . 113.69 ring to one observer, "for at least a 113.69 disamtal sulfur will have to strengthen

Estoes not seem likely in the near futimestic sulfur demand for the first 10 risd 1986, according to Bureau of Mines ્યું માટે fallen 13 percent below that of fect export volume is a questionmark in the Mandemand for fertilizer (representing ninds of producers.
An area that most marketers have miles by the sulfur's domestic usage) is ex-

# are watching, is the replaceability of soil ash with caustic soda in many applications. Observers note that if caustic soda prices the continue the firming trend which began is continue to the continue trend which began is continue to the continue trend with the continue trend which began is the continue trend which b to speculate about actual replacement wiumes, one producer says there is at least a umes, one producer says there is at least 1 WSt Cut Seen potential for 200,000 to 300,000 tons of

od & Drug Administration last fit approved the licensing of a UREA — A decision by the Comment Department regarding the imposition of the ties on imported urea will be announced on the comment of the com differinarians and others likely to be well to animals carrying the deadly

ties on imported urea will be announced used the US market will remain muddled regard the US market will remain muddled remain muddled remain muddled remain mud The supply of imported urea, for example the supply of imported urea, for example the bigher dose human cell culture has doubled (through October of 1986) to it wish bigher dose human cell culture million short tons, but at widely differed million short tons, but at widely differed prices. At the same time, demand for weak prices. At the same time, demand for weak the vaccine will be much less expendifficult to project due to USDA land-bight was vaccine will be much less expendifficult to project due to USDA land-bight was vaccine will be much less expendifficult to project due to USDA land-bight was vaccine will be much less expendifficult dose. Consequently, FDA says participate. As a result, US was produced to use by people visiting or the sub-part capacities. lane firm originally licensed to manu-The supply of imported urea, for example

only but sub-par capacities.

Sources report import prices (at Gull Standards. It may also be used to protect.

Coast docks) to range from \$61 per ton for Coast docks) to range from \$61 per ton for Russian, East German, and Romanian wet.

Russian, East German, and Romanian wet.

Russian, East German, and Romanian wet.

\$67 for Italian; and \$78 for Venemelan by the standard of the

US prices will have to reach the source range to forestall slowdowns and outling shutdowns.

The reason import duties may not restore the \$100-to-\$110-per-ton range of prices to the \$100-to-\$110-per-ton range of prices of the larger, intra-tong to the world (fix and overcapacity throughout the world (fix and overcapacity through out the larger, intra-tong the world (fix and overcapacity through out the larger, intra-tong the world (fix and overcapacity through out the larger, intra-tong the larger of the larger, intra-tong the world (fix and overcapacity through the world (fix and overcapacity the world (fix and overcapacity the larger of the larger of the larger, intra-tong the larger of parts of the US in the past few years, in raccoons in the eastern US, FDA

weeks before he became ill. He died

May 20, 1985, in an Abilene, Texas, hospital. The source of his exposure was never discov-

The symptoms of rabies range from persistent nausea to violent muscle spasms. Once these symptoms are evident, rables is almost always fatal.

US studies demonstrated adequate immunity in 100 percent of recipients of the new low-dose vaccine, according to FDA. The studies were carried out by scientists of the national Center for Disease Control, which has its headquarters in Atlanta, and several at veterinary schools.

## **Ceramic Products**

Continued from Page 7

tic dominance is in sight because of the more sophisticated tasks that are being required of IC's as well as strides that have made their manufacture more economical. Many of the big automobile manufacturers

are reported investing large sums in advanced ceramic R&D in hopes that a cheaper-to-build, easier-to-maintain engine will be forthcoming.

By some estimates, ceramics can improve efficiency from 30 percent to 50 percent over today's conventional engines allowing for higher operating temperatures and reduced weight, friction and inertia.

The obvious and unfortunate drawback at this time IRD says, is what is referred to as catastrophic failure — advanced ceramics don't break down, they blow up. This means that instead of a valve job a car owner would need whole new engine.

Besides the much-publicized Japanese dominance in semiconductors, there are signs that they are way ahead in the area of automobile heat engines also, IRD says. Nissan was the first manufacturer to announce a car including a ceramic part.

Already a good percentage of ceramic IC's are used by the US military, again for the qualities of reliability and capacity, which gives American industry even more reason to make sure it remains a viable contender in this market.

# **Formaldehyde**

Continued from Page 7

cers of the pharynx, sinus and nasal cavity (1) related to occupational exposures and (2) to residential exposures by T.D. Vaughn, C. Strader, S. Davis and J.R. Daling, published Pierlow-dose rabies vaccine to procember 1986.

 A report to be published in the January 1987 Issue of the Journal of the National Cancer Institute on cancers of the nasopharynx and oropharynx and formaldehyde exposure by A. Blair, et al.

 An exchange of letters between Charles E. Adkins, acting director of health standards programs at OSHA, and officials of the Motor Vehicle Manufacturers Association on exposures in automotive foundries between 1984

• A study of formaldehyde exposure of Iowa funeral directors issued by the Iowa State Department of Health and the University of Iowa hygienic laboratory, authored by J.A. Eure, et al

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### FMC Files Insider Trading Suit

The lawsuit, filed in the US district court, northern district of Illinois, seeks damages in excess of \$260 million for violations of Federal securities laws and civil violations of the Racketeer Influenced and Corrupt Organizations (RICO) Act, as well as violations

Commenting on the action, FMC chairman and chief executive, Robert H. Malott as the free-market system has been "jeopardized by Wall Street players caught in the gripd takeover fever and get-rich-quick schemes," and added that FMC will "aggressively set the pigment intend to raise furnace

In its complaint, FMC seeks recovery of the \$975,000 profit made by Mr. Boesky online
February 21 sale of FMC stock; recovery of the \$17.5 milion fee paid by FMC to Goldman. Sachs; recovery of profits of third parties who benefited from insider trading of Fig. disenervated market. stock, which includes approximately \$20 million in additional profits accrued by Mr. Boesky; and \$225 million in damages based on the increased cost of its recapitalization

### **BP Buys Advanced Composites Unit**

British Petroleum Company and Owens-Corning Fiberglass Corporation have signed an agreement under which BP will acquire the Hitco subsidiary of Owens-Corning's aerospace and strategic materials group for \$240 million in cash. The transaction is expected to be completed in January, subject to Hart-Scott-Rodino and the usual closing

Owens-Corning is selling the businesses which make up the aerospace and strategic materials group as part of a previously-announced restructuring and recapitalization plan. The group was acquired from Armco, Inc. in September 1985 for \$418 million. Owens-Corning had previously sold three of the group's units. Those remaining to be sold are Ladish Company and Oremet.

BP will effect the transaction through Bristol Composite Materials, Inc., a wholly owned subsidiary of BP North America, Inc. and part of the BP advanced composites

Hitco, based in Newport Beach, Calif., claims a significant presence in the US at vanced composites industry with sales of \$150 million in 1985.

### Rorer Keeping Armour Subsidiary

Rorer Group, Inc. will keep Armour Pharmaceutical Company. The company bad announced its intention in July to consider divesting Armour with the primary objective

of obtaining prescription or consumer pharmaceutical product lines in exchange.

Rorer chairman and chief executive officer, Robert E. Cawthorn, says the company received "several good offers", but that they did not include a "suitable" product exchange. Meanwhile, Armour has a number of new products under development, including a highly-regarded monoclonal antibody product for treatment of hemophilia.

Armour Pharmaceutical, previously a subsidiary of the Revion health-care group, was acquired a year ago and had worldwide sales of approximately \$160 million in 1985. The company ranks fifteenth in terms of sales among companies serving hospitals in the US

### Alcoa Buys Stake in Separations Firm

Aluminum Company of America has purchased a majority interest in Universal Adsorbents, Inc., Atlanta, Ga.-based specialists in chromatography products used in purification processes for the pharmaceutical and biotechnology industries. Termsofthe

UAI will operate as part of Alcoa's separations technology division formed early in 1986. A new plant will be built in Atlanta to broaden UAI's line of chromatographic

Alcoa expects 1987 sales for its separations technology division, which also includes units utilizing ion exchange, filtering and membrane technologies, adsorbents and specialty materials for the petrochemical and catalyst industries and a waste and water treatment company, to exceed \$120 million.

# Koppers Authorizes Buy-Back

Koppers Company says its board of directors has authorized purchase of up to 4.5 million shares, or 15 percent of the company's outstanding common stock, as part of a restructuring plan in progress since the end of 1985.

The company currently has about 29.9 million shares outstanding and says it will purchase in the open market or otherwise, including an odd-lot buy-back offer to holders of less than 100 shares Charles R. Pullin, Koppers' chairman, says the company has "achieved most of our goal of divesting 10 businesses in 1986." More important, he says the company will have more funds for an advantage of the company will have

Asset sales were expected to generate \$160 million for use in entering new operations related to existing core businesses and to redeem or purchase stock.

Koppers has acquired two companies with annual sales of \$80 million in the construction materials and services business and formed an equally-owned joint venture with annual sales of nearly \$200 million in 1986.

## **Chemical Financial Briefs**

Allied-Signal Inc. is in active negotiations to sell its 15.6 percent stake in Healey Greet back to the company. The sale, for about \$450 million, is expected to be completed next month.

irris Chemical, Inc. have authorized the company to make an offer to purchase up to 64,497 shares of its common stock held by shareholders other han A.B. Burris, Jr., chairman, and Gerald L. Wheatley, president, and members of their immediate families. The price of Common stock held by shareholders other immediate families. ate families. The price of offered will be \$75 per share.

Ethyl Corporation, has acquired 13.8 percent of the common stock of Nelson Research & Development Company, Irvine, Calif., and Nelson's board of directors was expected to actiate last week on a proposal by Ethyl to acquire the remaining shares. Ethyl hought 1,270,000 shares of the company's common stock through a wholly owned subsidiary in a priately negotiated transaction. The price was not disclosed. priately negotiated transaction. The price was not disclosed.

GAF Corporation has acquired 2,148,700 shares of CBI Industries, Inc. commonstock, representing approximately 9.9 percent of that company's outstanding shares, at an average cost of \$26,21 per share. GAF is filing a Schedule 13D with SEC and intends to fill the company's outstanding shares, at an average cost of \$26,21 per share. GAF is filing a Schedule 13D with SEC and intends 150 under 14 per cent but under 150 under 15 under Hart-Scott-Rodino to permit the company to purchase over 10 percent but under 15 percent of CBI shares. CBI, based in Oak Brook, Ill., owns industrial gas maker, Liquid Carbonics Industries Corporation, which contributes one-third of revenues.

# COATINGS & PLASTICS

# FMC Corporation has filed a lawsuit against, among others, Ivan F. Boesky and various Boesky companies; David S. Brown and Goldman, Sachs & Co.; Ira B. Sokolow and Shearson Lehman Brothers Inc.; and Dennis B. Levine and Drexel Burnham Lamber Inc. The suit alleges insider trading and misuse of information relating to FMC3 at both points and process this January billion recapitalization, completed earlier this year. For Higher Prices this January

alleg prices have had a significant imadm carbon black margins this quark. Responding to a 25 percent increase Mack selling prices in January, a move thich should help restore some health to

Columbian Chemicals Company was the ful producer to call for higher selling prices two weeks ago, when it announced a 7 to 8 percent increase in carbon black selling ples to take effect January 5.
Lad week, Ashland Chemical Company,

M Hober Corporation, Cabot Corporation wish Richardson Inc. followed with 1-centperfound increases for January 15.
These increases will bring selling prices

w Buber's N-500, N-299 and N-700 grades to hiscents per pound, 25 cents per pound and Rents per pound, respectively. Prices for Mani N-339 will be 23.25 cents per pound rd24 cents per pound.

Prices for the pigment followed oil for the traitire quarters of 1986. Through March, #CBO prices dropped from \$21.50 per bar-wosts per barrel, carbon black tabs fell a

ध्रार्थ 3.25 cents per pound. Between March and August, they slipped useditional 2.75 cents per pound; pigment are were last officially changed in July, the producers cut selling prices by 1 cent pround as CBO fell to a low of \$9.50 per cBO COSTS UP

Overthefourth quarter, however, crude oil to CBO prices began to climb. In October to Movember, CBO values firmed a total of I per barrel, bringing them back to second sufer levels of \$12.50 per barrel.

Despite this increase, carbon black proten were unable to pass along higher sal have been selling material at hy's price levels

Imports of both finished rubber goods and who black pigment have weakened the US inket considerably in the past four years. blace, producers say that pigment imports re fallen this year.

There has been no abatement of finished dsimport levels however; increased pasregerear tire imports are expected to stifle market growth this year. Tire applicaassecount for more than 55 percent of the damual output of earbon black. With thre Mis up to around 35 million units this jär, producers say demand should remain lät at last year's level.

# , MASTICS MATERIALS

PHENOLIC RESINS — The Forest Prodis Division of Borden Chemical Company raise prices for its phenolic resins on losary I, the company announced last

Fices for its 40 percent liquid grades will crease by 1c. per pound on that date; prices disher grades will vary depending on solid

Borden's Industrial Phenolics Division red prices for industrial phenolic resins lous week, moving prices for flake, brand powdered activated can ther and liquid grades up from 1c. per sale 4c. per pound, depending on grade. ML Specialty Resins led this price ininc movement, announcing comparable in increases after phenol producers and lanuary increases (CMR, 12/8/86;

# MINE PIGMENTS

OPPER OXIDE — C.P. Chemicals Inc., hading producer of cupric and cuprous its is raising seiling prices for its woodthent grades of black cupric oxide by 6c. wond, immediately. The increase, the amount in April.

Higher raw material costs and lower first since last year, will bring the market price for truckload quantities of the oxide to

92c. per pound. A spokesman for another leading producer indicated that his company also plans to raise selling prices for comparable product lines in January, but formal announcements have

# PRICES TRENDLINES

WEEK ENDING DEC. 19, 1986

CHANGES/UP

### CHANGES/DOWN

### **COATINGS INDEX**

The Coatings & Plastics index reflects the prices of 13 representative materials In this sector and the quantity of each produced in 1985.

P	
Dec. 19, 1986	306.4
Dec. 11, 1986	
Dec. 22, 1986	
Dec. 20, 1985	

Chemical Prices Start on Page 28

not yet been made, and an effective date has not been established. Remaining producers have not announced price moves.

Increased raw material costs are said to be driving this increase, along with heightened demand. Traditionally, most raw material metal has been derived from spent metal, a byproduct of printed circultboard manufacturing. Last year, the number of circuitturing. Last year, the number of circuit-boards produced fell, lowering the amount of available spent material. Lower circuit-board production has continued this year, producers say. Although the fall in produc-tion is "not precipitious," says one, it has nevertheless forced them to turn to more expensive pure metal material. Currently, more than half of the total raw material metal is being drawn from pure metal stores.

While inexpensive raw material stocks have decreased, demand for wood-treatment grades has risen sharply. Although it is not expected to sustain this growth, the market for this grade of product has seen 10 to 15 percent annual growth for the past 3 to 5

The oxide is also used as a catalyst, an organic dye intermediate, and an additive in

ceramic production.

IRON OXIDE — Last week, Mobay Corporation officially announced that it will raise prices for its "Bayferrox" synthetic iron ox-

ide pigments by 3c. per pound on January 1. New list prices for "Bayferrox" reds will range from 65c. per pound to 70c. per pound; those for "Bayferrox" yellow, from 64c. per pound to 67c, per pound. "Bayferrox" blends will sell for 69c. per pound. Prices for the pigment were last incressed

n 1982, then lowered again in April, 1985. So far, other domestic producers have not announced any pricing changes.

# **MISCELLANEOUS**

ACTIVATED CARBON - American Norit raised prices for some of its "Darco" ber 1, the company announced last week. The price for its primary general purpose product, "Darco" S-51 is now 5c.-per-pound higher, at 61c. per pound.

Increased manufacturing costs were cited as reasons for the increase, According to D.K. Colona, "Darco" sales manager, this is the first time prices for the product have been increased in over four years.

Calgon Carbon Corporation, another major producer of activated carbon increased prices for its product lines in March by 2.5 to 3 percent, while the Ceca Division of Atochem Inc. raised prices a comparable

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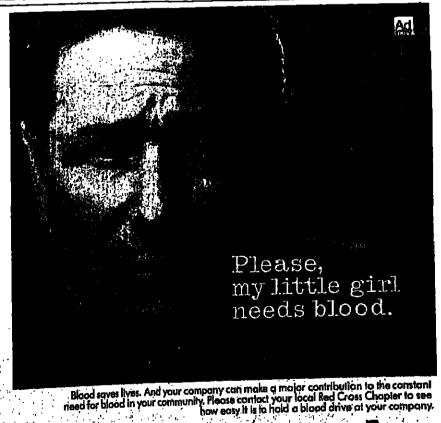
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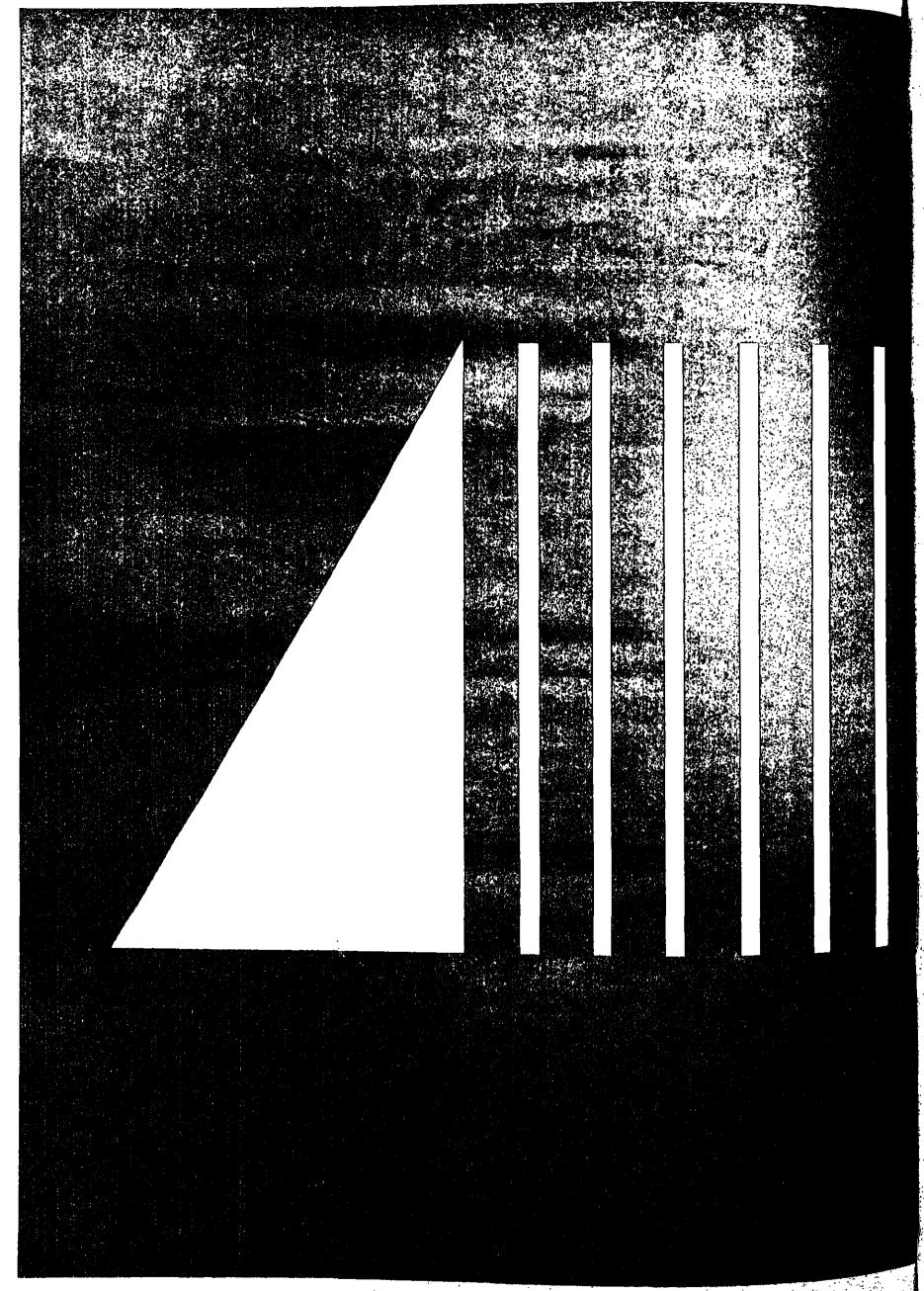


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December 22, 1986

# Aldehyde Prices Affected By Dollar, Importers' Outlays

Imported aldehyde C10 spot prices sential oil broker, "production fell and non ecorded a 25-cent to 35-cent increase last week to \$4.10 per pound. Domestic pricing remained steady, however, and producers here expect to maintain current levels through the second quarter of

"An increase of about 30 cents doesn't fully over the dollar fluctuation in overseas markets," says an aroma chemicals distributor. Prices are being caught in transition and omeone along the line is absorbing the mar-

Another industry source agrees, contendng prices for imported material would go igher but foreign producers are trying to emain competitive in the US market. He mphasizes that "no domestic producers ave made any moves yet."

One domestic producer says pressure to raise prices isn't sufficient for immediate action and that the dollar's weakness abroad is drawing buyers to the US. "We've found we can still be very competitive at the \$3.75 per pound level; we're doing a lot of new business." He adds that this price will remain set 'through the next six or seven months."

### DEMAND IS LACKING

Industry sources agree that demand has not picked up significantly enough to war-rant the aroma chemical's firming. One prolucer says there is "no surge in usage" to support higher prices and another finds nothing visible" in the consumer market to back up the price increases.

One of these producers attributes the price inflation more to the volatility of the aroma chemicals business than to jockeying for market share: "A lot of price instability has been occurring with the aroma chemicals that are influenced by imports." He says that though the dollar's recent weakness has certainly affected importers' costs, the fluctuation is likely to be short term. Adding that "sales are strong," he says that no direct correlation between the imports' firming and domestic sales could as yet be made.

A market analyst says foreign producers are "paying more now for labor and raw material costs; while domestic costs have not

Pricing predictions for aldehyde Cio, or -decanal, call for a plateau at the \$3.90 range once the dollar's decline on international markets stops and begins to turn around: second quarter, 1987.

## **ESSENTIAL OILS**

BALSAM COPAIBA - Balsam copaiba's shipping prices have undergone a steady firming in the past two weeks, up 33c. to 40c. per pound, f.o.b. The material had hovered around the \$1.75 per pound level since last October when it went up from \$1.60 per pound. It is currently \$2.05 per pound, f.o.b.

"Its such a small item," says an essential oils dealer, "that people only buy it once a year or so." He continues to say that producers may be setting a price level in anticipation of renewed contracts in 1987.

Balsam copaiba does not have as wide an applicability as the two major balsams, peru

CAMPHOR OIL - Camphor 1.070 and vellow camphor oil prices both increased last ues to lessen. Camphor 1.070, the largest volume camphor imported to the US, firmed 25c. to 40c. per kilo to \$5.50 per kilo cost and freight, New York. Yellow camphor, the smallest volume camphor on the market, has finally felt the effect of dwindling oil production in Taiwan, rising 50c. per kilo to \$2.90 per kilo, same basis.

The natural camphor market is suffering from the mounting popularity of synthetic camphor products. Natural camphor im-ports in 1986 are expected to be barely 20 percent of the 1985 year-end total of 153,214 pounds. "As demand weakened," says an es-

there's very little material available." EUCALYPTUS — Australian eucalyptus oil shipping prices have increased steading

over the past two weeks, gaining 30c, per kilo for material shipped from origin, cost and freight, to \$5.65 per kilo.

Price fluctuations with Australian excelyptus are usually attributable to the changing needs of the buyer,' says an essential old broker. The Australian eucalyptus, he says.

# PRICES TRENDLINES

WEEK ENDING DEC. 19, 1986

### CHANGES/UP

Aldehyde C-10, 25-35c. per ib.
Anethole, 40c. per ib.
Camphor oli, yellow, 40c. per klio
Cassie, Korintji A&B, 2-5c. per ib.
Chillee, Chinese Zheljang/Fuklan, 3c. per b.
Lemon oli, Argentine, 30c. per klio
Mace, Slauw #2, 10c. per ib.
Musk ketone, \$1 per ib.
Pelmerose oli, Indian, \$3.50 per klio
Peppermint oli, Native, 30c. per klio

# **CHANGES/DOWN**

Cardemon oil, \$5 per lb. Cumin seed, Iranian, 2c. per lb. Ginger oil, Chinese \$2-8 per kilo Lemon oil, Italian, 25c. per kilo Lemon oli, italian, 25c, per kilo Nutmag oli, indonesian, \$1 per kilo Pepper oli, black, \$5 per kilo Spearmint oli, Native, 60c, per ib. Spearmint oli, Scotch, 25c, per kilo Vativert oli, Javan, 50c, per kilo

# **PERFUMES INDEX**

The Perfumes & Flavorings index re flects the prices of 11 representative materials in this sector and the quantity of each supplied in 1985.

Dec. 19, 198671.0 Dec. 12, 198671.0 Nov. 21, 198671.0 Dec. 20, 198571.0	Chemical Prices Start on Page 28
Dec. 12, 198671.0	Dec. 20, 198571
Dec. 19, 198671.0	Nov. 21. 1986 <sup>71</sup>
Dec. 19, 198671.0	Dec. 12, 198671
44.6	Dec. 19, 198671

has been sought after but not because it is preferred: "It has no special merit."

Another essential oils broker agrees, cling a rush of demand that has depleted stocks in Australia: "Orders have been placed above the Australians' ability to satisfy them."

Australia used to supply the entire world market with eucalyptus, says one industry observer. But with the advent of competition from Portugal, South Africa and especially China, Australia fell out of prominence 25 a major eucalyptus exporter.

"China got a handle on the market," says one source, "by offering eucalyptus that hadn't been processed into eucalyptol first material that contained 80 to 85 percent eucalyptol." Australian and Portuguese eucalyptus oils yield 70 percent eucalyptol.

### **SEEDS & SPICES**

BLACK PEPPER — Black pepper spot prices firmed 8c. to 10c. per pound in the last two weeks, pushing the \$2.50 ceiling predicted by market analysts in October. Bratilicated by market analysts in October. Bratilicated by market analysts. ian, Malabar and Lampong were up an average of 8c.; Tellicherry was up as much as 14c.

Price gains came in response to increase buying interest combined with reports that the Indian crop will be on the low end of predictions, 42,000 to 45,000 tons.

World markets are anticipating the Soriet Union's entrance into the Indian market and sources speculate that timing of their forthcoming purchases could dramatically affect pricing into the Spring of 1987. If the USSR were to hold off buying, one source says, demand could be covered and pepper would ease; if they place covered and pepper month. ease; if they place orders in the next month, the market will continue to firm with prices

reaching the \$2.60 per pound range.

White pepper prices, in contrast, continue
to soften, losing 5c. to 8c. per pound to \$2.95 per pound.

# PERFUMES & FLAVORINGS CHEMICAL IMPORTS

IIS imports of chemicals and related materials are reported in this section by container, net weight, name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

Us chemical imports/exports are tabulated monthly in the market reports.

RETAINOPHEN Sterling Organics 243 data (42591 b) (Rouen) Rotterdam, 11/13.
ACETO BALICILIC ACID Janel Intl Fwdrs 30 ctn (42229

be) (Clarence) Rotterdam, 11/6. Mobey Chemical 30 ctn (42229 lbs) (Roue

Dansos) Padeng, 11/16.

CASSIA AA VERA William E Martin 125 ctn (11850 lbs) (Hoegh Dansos) Padeng, 11/16.

CASSIA KB Ludwig Mueller 167 bgs (22414 lbs) (Hoegh Dansos) Padang, 11/16.

CASSIA KB Ludwig Mueller 167 bgs (22414 lbs) (Hoegh Dansos) Padang, 11/16.

CASSIA KORINTJI Daarnhouwer 1254 bgs (155676 lbs) (Hoegh Dansos) Padang, 11/16.

Durkee Foods 300 bgs (33201 lbs) (Hoegh Dansos) Padang, 11/16. 11/12. HEPPEY FINGER TURMERIC McCormick 250 bgs d3510 lbs) (Addiriyah) Oubal, 1 1/18. Ltv. GLYCIDYL, ETHER Nichimen 10 dms (4085 lbs)

Meerski Tokyo, 11/7. JUMNUM OXIDE Degussa 2 bks (86058 lbs) (Sea Land Franklin Trdg 250 bgs (33620 lbs) (Hoegh Danace Padang, 11/16. Leader) Algeciras, 11/12. Nation 1400 bgs (157761 lbs) (Dart Britain) Bremer-leven, 1/112.

Ingradient Resources 167 bgs (22414 lbs) (Hoegh

Danaos) Padang, 11/16.

Van De Vries Trog 167 bgs (224141bs) (Hoegh Danaos)
Padang, 11/16.

471 bis (67694 lbs) (Hoegh Danaos) Padang, 11/16.

Louis Furth 14/3 bgs (22361 lbs) (Hoegh Danaos)

Padang, 11/16. ASSIA VERA A A Sayla 70 bgs (5743 bs) (Hoagh

Morris J Golombeck 158 ctn (11627 lbs) (Hoegh Danacs) Padang, 11/18., 107 bdi (11259 lbs) (Hoegh Danacs) Padang, 11/16. CAUSTIC POTASH FLAKES Federal Chemical Ind 18 pkg (45466 lbs) (Sea Land Leader) Algectras, 11/12. CAUSTIC SODA Independent Chemicals 1680 bgs (86840 lbs) (Almudens) Barcelons, 11/9. CEDARWOOD OIL W R Kealing 168 dms (75186 lbs) (Ace

Accord) Hong Kong, 11/12.
CELERY SEED Fritzeche Dodge & Olcott 480 bgs (59525 lbs) (Ocean Legend) Singapore, 11/17.
A A Sayle 252 bgs (33334 lbs) (Addirlysh) Dubal, 11/18.
A Kazemi 170 bgs (22487 lbs) (Addirlysh) Dubal, 11/18.

Gel Spice 252 bgs (33334 lbs) (Addiriyah) Dubel, 11/18. Joseph Adams 213 bgs (28175 lbs) (Addiriyah) Dubal, 11/18.

Morris J Galombeck 252 bgs (33334 lbs) (Addiriyah) Oubal, 11/18. Transit Trdg 213 bgs (28175 lbs) (Addiriyah) Dubai,

373 bgs (48339 lbs) (Addiriyah) Dubal, 11/18.
CELLULOSE Spontex 234 pd (11876 lbs) (American Georgia) Rollerdam, 11/10. CELLULOSE ACETATE Panalpina 8 ctn (741 lbs)

(Clarenco) Lehavre, 11/18.
CHLORANIL INTERMEDIATES Bemo Shpg 20 dms (7628 lbs) (Ming Sun) Kobe, 11/12.
CHLORENDIC ANHYDRIDE Nagase America 15 dms (3737 lbs) (Ming Sun) Yokohama, 11/12.
CINNAMON BARK Rucker & Stann 188 bgs (15465 lbs)

CINNAMUNI BARK RICKER & CAMIT 100 bys (1940 bis (Rouen) Rotterdam, 11/13. CINNAMON STICK McCornitck 100 pkg (11484 lbs) (Hoogh Danacs) Padang, 11/16. CITRIC ACID ANHYDROUS Davies Turner 720 bgs

(40741 lbs) (Almudene) Genoa, 11/9. COALTAR INTERMEDIATES Mobay Chemical 800 bgs

ibs) (Export Patriot) Genos, 11/18. CRUDE IODINE 100 pkg (11884 bs) (Cosan Legend)

Yokohama, 11/17. CUMIN SEEDS Louis Furth 255 bgs (33731 lbs (Addirtyah) Dubal, 11/18.
Ludwig Müeller 400 bgs (48502 ibs) (Addirtysh) Dubal, 11/18.

Max Van Pels 400 bgs (48502 lbs) (Addinyah) Dubel. 11/18.

Dansoa) Dansoa) Bombay, 11/16.

RBOXYMETHYL CELLULOSE BONIATEX A L Chem
640 bgs (35658 lbs) (American Hawaii) Rio D
Jackto, 11/14.

ARBOXYMETHYL CELLULOSE CELLOGEN Failek
Chamlogi 100 bgs (8123 bas) (Kiso Maru) Kobs, 11/

CARDAMOM LARGE Indian Groceries & Spices 10 bge (1148 ba) (Hoegh Danace) Bombay, 11/15, CARRAGEENAN Harold Pepper 100 dms (11023 ibs)

(Kiso Maru) Kobe, 11/13.

CASSIA McCormick 400 bgs (55997 lbs) (Hoegh Danace)
Padang, 11/16.

Schilf Food Products 240 bgs (33598 lbs) (Hoegh

THYL SALICYLATE 2 dms (970 lbs) (Dart Britain) Felixs THYLENEDIAMINE 2 trk (80159 lbs) (Clarence) Rotter

dam, 11/6. THYLHEXANOIC ACID 80 dms (36685 lbs) (Sea Land Express) Rotterdam, 11/14. UGENOL USP 25 dms (12180 lbs) (Ace Accord) T J

Prick, 11/12. XTRACT F TANNING A & S 80 bgs (4409 lbs) (Alnudens) Genos, 11/9 AST BLUE B BASE Westco Chemicals 20 dms (3351 lbs)

(Hanjin New York) Yokohama, 11/9. NNEL CUMIN AJWAN SEEDS Little India Stores 20 pkg (1570 lbs) (Hoegh Dansos) Bombay, 11/18. FENNEL SEEDS Mincing Tridg 200 bgs (26455 lbs) (Addirlysh) Dubal, 11/18 FENUGREEK SEEDS Transit Tridg 170 bgs (37479 lbs)

(Addiriyah) Dubai, 11/18 ENUGRIC SEED Nediloyd Lines 400 bgs (44092 lbs (Clarence) Rotterdam, 11/6. RROUS FUMARATE 345 dms (40311 lbs) (Rou

LAVOMYCIN CONCENTRATE MEDICATED 817 bos (46222 lbs) (Clarence) Rotterdam, 11/5 LUOROCARBON POLYMER Schenkers Inti Fwdrs 147 dms (10589 lbs) (Kiso Maru) Tokyo, 11/13. LUOROCARBON POLYMERS Viking Sea Freight 158 dms (18889 lbs) (Kiso Maru) Kobs, 11/13

590 dms (70788 lbs) (Kiso Maru) Nobe, 11/13 180 dms (19400 lbs) (Kiso Maru) Tokyo, 11/13. OLIC ACID Mitsul 20 pkg (1323 lbs) (Ace Accord) Kobi

RUCTOSE CRYSTAL Graymor Chemical 1242 bgs (85538 lbs) (E R Brussel) Bremen, 11/17. Mitsul 563 ctn (18959 lbs) (Barber Texas) Yokohama

11/14. URAZOLIDONE BP CCN 12 dms (741 lbs) (American Georgie) Rotterdam, 11/10. USED MAGNESIA Norton 65 ctn (3562 lbs) (Kiso Maru) Kobe, 11/13. ELATIN Corbett Intil 220 dms (46561 lbs) (Ever Shine)

Fos, 11/17. H P Lambert 1 con (49775 lbs) (Ever Shine) Fos, 11/17. GELATIN Davis Gelatine 1360 bgs (76156 bs) (Cartagena De Indi) Cartagena, 11/12. GERANIOL Bubal 1 dms (439 bs) (Dart Britain) Felixa-

SPAPHITE Asbury Graphite Mills 720 bgs (80954 lbs)

(American Georgial Rotterdam, 11/10, Foseco 3 cn (7286 lbs) (McKinney Maerak) Koba, 11/7. 3UAR GUM A E Pellet 870 bgs (44077 lbs) (Addinyah)

Colony Imports & Exports 2200 bgs (111941 lbs) (Addiriyah) Dubal, 11/18. Mara Shpg 720 bgs (35644 lbs) (Addiriyah) Dubal, 11/ Meer 870 bgs (44077 lbs) (Addirlysh) Dubal, 11/18.

m Gums 800 bgs (40230 lbs) (Addinysh) Dubal, 11/18. GUAR GUM POWDER HI Tech Polymer 880 bgs (44776

lbs) (Addiriyah) Dubai, 11/18. GUM BENZOIN Navtrans Inti Freight Fwdg 60 bgs (5622 ibs) (Dart Britain) Felixetows, 11/12. GUM KARAYA Diamond Shamrock 606 bgs (112620 lbs) QUM OLIBANUM PEA Darya Products 15 cs (1852 lbs)

(Hoegh Danaca) Bombay, 11/16. Max Van Pels 30 cs (3704 lbs) (Hoegh Danacs) Bombay, 11/16. GUM OLIBANUM PEA SIEZ WIRam Bernstein 20 ca (2469 Iba) (Hoegh Danacs) Bornbay, 11/18. GUM OLIBANUM SHIFTING Darya Products 10 cs (1235)

the) (Hoegh Danece) Bombay, 11/18. GUM OLIBANUM TEARS Darya Products 5 cs (617 lbs) (Hoegh Dansos) Bombay, 11/16.

Max Van Pels 30 cs (3704 lbs) (Hoegh Dansos) Bom-

bay, 11/16.

HETEROCYCLIC DIAMINE Alinomoto 13 mix (2571 lbs) (Ocean Legend) Yokohama, 11/17. HEXYLENE GLYCOL Sisse 80 dms (37125 lbs) (Ad-

diriyah) Ganos, 11/18. HYDRALAZINE HYDROCHLORIDE USP XXI Flavins Intl 48 dms (3704 lbs) (Ming Sun) Kobs, 11/12. HYDROCHLOROTHIAZIDE USP Bruzzone Shpg 53 dms

HYDROCHLOROTHIAZIDE USF Bruzzone sings as dres (8310 lbs) (Almudens) Genos, 11/8. HYDROCUINONE PHOTO GRADE Mitaul 720 bgs (41023 lbs) (Ming Sun) Kobe, 11/12. 356 drns (65940 lbs) (Ming Sun) Kobe, 11/12. Milaul 176 drns (44821 lbs) (Ming Sun) Kobe, 11/12. HYDROXY PHENYL GLYCINE F C Gerlach 140 cm (12939 lbs) (Atlantic Conveyor) Liverpool, 11/6. December 22: 1986

DEXTRINE 200 bgs (11133 fbs) (Dart Britain) Antwerp, INTERMEDIATES 296 bgs (22103 lbs) (Clarence) Breme

havan, 11/6. 118 dms (19848 lbs) (Ctarence) Bremerhavan, 11/6. 80 dms (19083 lbs) (Kiso Maru) Kobe, 11/13, 160 dms (42117 lbs) (Rouen) Bremerhaven, 11/13, IODOFORM NON HAZARDOUS Davos Chemical 10 dms

(1168 lbs) (Dart Britain) Felixstows, 11/12.
IRON OXIDE Trans World Shop 800 bgs (45195 lbs)
(American Georgia) Felixstows, 11/10.
ISOPROPYLTHIOXANTONE Avt Intl 10 dms (1185 lbs)

(Rough) Rotterdam, 11/13.
ISOPROPYLTITANATE Key Fries 1 lot (38316 lbs) (Ming Sun) Yokohams, 11/12.

DIHYDROISTAGETONE Bubai 2 dms (225 lbs) (Dart (Rouen) Hotterdam, 11/13. ISOSORBIDE DINITRATE F P Arrow Chemical 60 dms (Ocsan Legend) Singapore, 11/17. McCornick 195 bgs (25364 lbs) (Addiriyah) Dubel, 11

(6984 lbs) (Dart Britain) Fefixatowe, 11/12.
ITACONIC ACID Rhone Poulenc 2180 bgs (123678 lbs)
(Rouen) LeHavre, 11/13.
KARAYA GUM Meer 340 pkg (37685 bs) (Rouen) Feixa-

(Rouen) Felixetowe, 11/13. ARGININE & OTHER AMINO ACIDS Kyowa Hekko 98 dme (12099 lbs) (McKinney Maersk) Kobe, 11/7. CARVONE American Shpg 30 dms (13223 lbs) (Ameri-

133 pkg (15086 lbs) (McKinney Maerski Kobe, 11/7. L TRYPTOPHAN Showa Denko America 20 dms (2557 lbs) (Ocean Legend) Yokohama, 11/17. LAMPONG ASTA BLACK PEPPER DMT 758 bgs EPOXY RESIN Ciba Gelgy 1680 bgs (95461 lbs) (Rouen) Rotterdam, 11/13. Stolt Tank Containers 1 con (40013 lbs) (Hanjin New

(American Apollo) Santos, 11/10.

LIVER DESSICATED Byron Chemical 32 dms (10406 bs)
(American Apollo) Buenos Aires, 11/10.

LOCUST BEAN GUM POWDER Polypro Intl 800 bgs
(44533 lbs) (Sea Land Leador) Algeciras, 11/12.

MAGNESIUM CARBONATE Desmo Chainical 500 bgs

(28109 ilis) (Ming Sun) Kobe, 11/12 MALIC ACID GRANULAR & POWDER Militans 770 bgs (39043 the) (Ming Sun) Kobo . 11/12. MANNITOL E. M. Ind. 380 ctn (44180 libs) (Rougn) Bremer-

(13851 ibs) (Hogh Danaos) Bombay, 11/18
METHENAMINE MANDELATE Roussol Prarmacoudcal
Produ 80 dms (9524 ibs) (Ming Sun) Yokohama,
11/12.
METHYL BUTYRATES Pan American Container 5 dms

hama, 11/12. METHYLPENTENE POLYMER RT18 MX004 Saraioga Fwdg (076 bgs (33642 lbs) (Hanjan New York) Koba, 11/9.

11/9.
MICROSPHERES POLYVINYLIDENE CHLO Pierce & Sievens Chemical 181 mix (20457 lbs)(Atlantic Conveyor) Bromerhaven, 11/6
MINO CHLORONAPHTHALENE Scunfreight 10 dms

ars 1 this (34877 lbs) (Ming Sun) Kobo, 11/12.

MONOSODIUM GLUTAMATE Alinomoto 380 dms (39000 lbs) (American Apollo) Santos, 11/10.

2340 bgs (118652 lbs) (ltepe) Santos, 11/11.

Von Scheven 800 bgs (40565 lbs) (ltepe) Santos, 11/11.

MUNTOK WHITE PEPPER DMT 180 bgs (33863 lbs) (Barber Taves) Singsporn, 11/14.

ber Texas) Singaporo, 11/14

BUTYL METHACRYLATE MONOMER MEH 78 dms merhaven, 11/6.
CKEL PHTHALOCYANINE BLUE CRUDE Sumitomo of America 316 bgs (8042 lbs) (kiso Maru) Tokyo, 11/

Ibs) (Sea Land Express) Rotterdam, 11/14.
ORANGE OIL COLD PRESSED George One 80 dms (35274 lbs) (American Haweli) Santos, 11/14. ORANGE OIL COLD PRESSED 118 dms (52029 lbs)

can (0 lbs) (Sea Land Express) Rotterdam, 11/14.

OXALIC ACID T R America Chemicals 1430 bgs (78446 lbs) (American Hawaii) Rio D Janeiro, 11/14.

OXYTETRACYCLINE CCN7 ca (814 lbs) (American Georgia) Rotterdam, 11/10.

NTRANILINE TRITIG 152 cak (38457 lbs) (Rouen) Rot terdam, 11/13. PARA CRESOL Neville Synthese Organics 1 tnk (41557

can New York) Kobe, 11/10.
PARAFFIN PETROLEUM WAX Astor Wax 18 pk (40873 tb) (Atlantic Conveyor) Liverpool, 11/6.
36 pk (91826 ibs) (American Georgie) Felixstowe, 11/

PERILONEAL DIALYSIS SOLUTION Delmed 8735 cs (269678 lbs) (American Georgia) Rotterdam, 11/10. PHENYLACETIC ACID Scanfreight 60 kgs (6790 lbs) (At-lantic Conveyor) Liverpool, 11/6. PHTHALOCYANINE BLUE CRUDE Dainichiselka Color & Chemic 1600 bgs (62858 lbs) (Ming Sun) Yoko-hams, 11/12.

NS RESIN Goldmack Plastic Compounds 4760 bgs (284276 bs) (Ming Sun) Kobe, 11/12.

Milme (40040 lbs) (Dart Britain) Bremerhayon, 1 1/12.

WONLATED GLYCYRRHIZIN LICORICE Meer 180

MONIUM BICARBONATE Rhone Poulenc 72 bbg

(7474 bs)(Rouen) Rotterdam, 11/13. NYONUM BIFLUORIDE Browning Chemical 880 bgs (4592 bs) (Sea Land Express) Bromerhaven, 11/

MLACETATE 3 dms (1257 lbs) (Dart Britain) Felistowo

- 11/12. ASESEEOS Max Van Pels 232 sks (25573 lbs) (Estoril)

timi, 11/10. AMMONY REGULUS Chi Mei Matals 30 pkg (734 13 lbs)

(Ace Accord) Hong Kong, 11/12 WINONY TRIOXIDE General Electric 680 bgs (38228

bs)(American New York) Hong Kong, 11/10. KD Group 720 bgs (40873 lbs) (Ace Accord) Hong

Kong, 11/12. Vanetals 54 plt (123812 lbs) (American New York)

Hong Kong, 11/10. SCORBIC ACID E M Ind 2304 ctn (155240 lbs)

(Carence) Bremerhaven, 11/6.
WWW CARBONATE Kall Chamle 1 bgs (G lbs) (Export

Patiol Leghorn, 11/18.

MRIJM FERRITE Magno Ceram 30 cs (120371 lhs) (Almudens) Genoe, 11/9.

MRIJM HYDROXIDE MONOHYDRATE Kell Charnig 720

bgs (0 lbs) (Export Patriot) Leghorn, 11/18. RIM SULPHATE E Z Em 840 bgs (47439 lbs) (Almu-

dens) Genos, 11/9. EZEm 1880 bgs (94878 lbs) (Export Patriot) Gurtos.

MSIL LEAVES Gel Spice 1221 bgs (24440 lbs) (Ad-

driyah) Fos, 11/18. Louis Furth 1256 bgs (46115 lbs) (Addiriyah) Fos, 11/

ENZALDEHYDE Hoyer 1 con (44268 lbs) (Rouon) Rot-

terdem, 11/13. ##200C ACID Radix Group Intil 800 bgs (41755 lbs) (E R

Brussel) Rotterdam, 11/17. ENCOPHENONE CRYSTAL Davios Turner 100 kgs

(11884 the) (Atlantic Conveyor) Liverpool, 11/6, 69x/0YL CHLORIDE Mariborough Chemilals 1 thk (42813 lbs) (E R Brussel) Folixatowo, 11/17, 69x/YL ALCOHOL Nearden Intl 75 dms (38076 lbs) (Almudens) Bercelons, 11/9, 11/8, 11/16, (41887 lbs) (Atlantic Convoyor) Liverpool, 11/8,

CDF Chimle 1 lnk (41843 lbs) (E Ft Brunsel) flottordam,

MAHYDROXYNAPHTHOIC ACID 159 dins (33834 lbs)

Roueni Rotterdam, 11/13. &TANAPHTHOL 784 bgs (43737 lbs) (Cinrunco) Rotter-

dan, 11/6.
BLANC FIXE POWDER Oro & Chamical 3535 bgs

(19804 hts) (See Land Express) Rollerdom, 11/14.

ADMINIM OXIDE 420 dms (48167 lbs) (E R Brussel)

APSICUM OLEORESIN 67 dms (7427 lbs) (Hoegh

bas (9980 tbs) (Estorii) Izmir, 11/10.

11/13. YAR AGAR Sanwa Trog 5 oln (0 lbs) (Ming Sun) Kobo,

(dso Maru) Kobe, 11/13. MANATE AL M Alinomoto 4 cs (397 lbs) (McKinney

Ingrodient Resources 167 bgs (22414 lbs) (Hoegh Danaos) Padang, 11/16.

Morris J Gofombeck 500 bgs (67240 lbs) (Hoegh Danaos) Padang, 11/16.

305 bis (34077 lbs) (Hoegh Danaos) Padang, 11/16.

200 bgs (33510 lbs) (Hoegh Danaos) Padang, 11/16.

Otto Gerdau 334 bgs (44628 lbs) (Hoegh Danaos) Padang, 11/16.

Schilf Food Products 668 bgs (89657 lbs) (Hoegh Danaos) Padang, 11/16.

Padang, 11/18.
Ludwig Mueller 200 bgs (22134 lbs) (Hoegh Danaos)
Padang, 11/16.
200 bgs (22055 lbs) (Hoegh Danaos) Padang, 11/16.
Rue Fwdg 400 bgs (44268 lbs) (Hoegh Danaos)

Danaos) Padang, 11/16. 75 ctn (7110 lbs) (Hoegh Danaos) Padang, 11/16. Morris J Golomback 158 ctn (11827 lbs) (Hoegh

Atlari Brothers 255 bgs (33731 lbs) (Addiriyah) Dubai

McCormick 187 bgs (24323 lbs) (Addinyah) Dubal, 11

11/18. CELERY SEEDS & FENUGREEK SEEDS Onto Gerdau

Miantic Conveyor) Liverpool, 11/6.

Miantic Conveyor) Liverpool, 11/6.

Millan Lime Oll. Fritzschip Dedge & Olcott 10 dms
(101 lbs) (American Apollo) Santos, 11/10.

Millan ORANGE Oll. Fritzschip Dodge & Olcott 250
dms(102516 lbs) (American Apollo) Santos, 11/10. CITRIC ACID ANHYDROUS Davies Turner 720 bgs
(80318 jbs) (Estoril) istanbul, 11/10.
CITRIC ACID MONOHYDRATE American Shpg 700 bgs
(39181 lbs) (American New York) Kobe, 11/10.
CLOFIBRATE USP XXI Mitsubishi Inti 5 dms (2447 lbs)
(McKinney Maersk) Tokyo, 11/7.
CLOVE Prudent Trdg 100 bgs (11089 lbs) (American
Hawai) Santos, 11/14.
COAL TAR INTERMEDIATES Montadison 179 dms
(40741 lbs) (Almuriana) Genos, 11/9. Antwerp, 11/17.
CADMIUM PIGMENT Devices Turner 160 dms (21240 lbs)

(Manto Conveyor) Liverpool, 11/8.

Mittaker Clark & Daniele 16 dms (0 lbs) (8ea Land Express) Rolterdam, 11/14.

AFFENE ANHYDROUS Helm New York Chemical 700 dms (41867 lbs) (American New York) Hong Kong. (34304 lbs) (Clarence) Bremerhaven, 11/6. COPPER CYANIDE Rit Chamical 64 dms (10892 lbs) (Ming Sun) Kobe, 11/12. CREAM OF TARTAR Tartario Chemicals 440 bgs (44974

CALCIUM CARBONATE H M Royal 6402 pkg (328512 CARBONATE H M HOYELDS (See La CARBONATE H) (Nobel 11/13.
CALCIUM GLUCONATE Pilzer 375 dms (41057 lbs) (See Land Express) Rotterdam, 11/14.
CMPHOR Mays Overseas Foods 2 ce (40 lbs) (Addiriyah)
Duhai 11/18 AMPIOR Maya Overseas Foods 2007

Dubat, 11/18.

10 big (22751 lbs) (Rouen) Bremerhaven, 11/13.

AMPIOR SYNTHETIC Indian Groceries & Spices 10 cs
(176 lbs) (Hoegh Danacos) Bombay, 11/16.

11 se Piec Olives 840 ctn (3951 lbs) (Almudena) Caldz,
11 se Olives 840 ctn (3951 lbs) (Almudena) Caldz,

11/18.
Morris J Golombeck 399 bgs (48380 lbs) (Addiriyah)
Dubal, 11/18.
CYANIDE Alloychem 240 dms (27198 lbs) (Ming Sun)
Kobs, 11/12.
D CALCIUM PANTOTHENATE Mitsublafi Intl 40 dms
(4850 lbs) (McKaniey Maerik) Tokyo, 11/7.
DEHYDRATED CASTOR Oil. FATTY ACID 2 lnk (81659 lbs) (American Apolio) Santos, 11/10.

DEHYDRATED CASTOR OIL FATTY ACID 2 (IIX (61666 lbs) (American Apolio) Santos, 11/10.

DEWHIBKERED DILL SEED Wallam E Martin 85 bgs
(11644 lbs) (Addirlysh) Dubel, 11/18.

DEWHIBKERED DILL SEEDS Louis Furth 250 bgs (33068 lbs) (Addirlysh) Dubel, 11/18. Chemical 100 bgs (6123 lbs) (Kiso Maru) Kobs, 11/ AMOM AA Daarnhouwer 8 pkg (818 lbs) (Addiriyah)

(84552 lbs) (American Georgia) Felixstows, 11/10. TRIZOIC ACID E R Squibb & Sons 220 dms (25628 ibs) (Almudenz) Genos, 11/9. DIBUTYLAMINE 1 tnk (38729 lbs) (Clarence) Bremer haven, 11/6.
DIETHYL META AMINOPHENOL Biddle Sawyer 60 dms

11/12. IAMINO DIPHENYL METHANE Ciba Geigy 480 dmr

DIPENTAERYTHRITOL Hermann Ludwig 1120 bgs

(62223 lbs) (Hanjin New York) Busen, 11/8.

ISODIUM 5 INOSINATE & GUANYLATE Ajinamoto 350 cm (9256 lbs) (Klao Maru) Yokohama, 11/13.

PHENYLPROPANOLAMINE Graymor Chamical 80 dms/7402 bas/Markin New York New York

dms (7407 ibs) (Henjin New York) Kobs, 11/9.

HYL BUTYRATE 14 dms (6173 lbs) (Dart Britain) Fe-

tal 50 bgs (2954 lbs) (Ming Sun) Kobe, 11/12. THYL CHLOROTHIOFORMATE PPG Ind 8 tnk (82899

(bs) (American Apollo) Buenos Aires, 11/10. [HYL PROPIONATE 25 dms (11023 lbs) (Dert Britein)

fixstowe, 11/12.
THYL C ACID INTERMEDIATE Universal Transconting

(7390 bs) (Hoegh Danaus) Bombay, 11/16.
DIETHYL SULFATE INTERMEDIATE 67 dms (37222 lbs

Britain) Felixatowa, 11/12. DILL SEED Schiff Food Products 280 bgs (28741 lbs)

towe, 11/13. KARAYA GUM SIFTINGS Celanese 200 bgs (38360 lbs)

cai Hawaii) Santos, 11/14. ISOLEUCINE LYSINE HCL TRYPTOPH Kyowa Hakko

(121253 lbs) (Barber Texas) Singapore, 11/14. LAUREL LEAVES McCormick 280 bis (28860 lbs) (Estori

| Izmir, 11/10. |
| LAVANDIN OIL Alitransport 25 dms (0 lbs) (Clarence) |
| LeHavre, 11/8. |
| LEAD BORATE Atomergic Chemetals 10 bgs (450 lbs) |
| (Kiso Maru) Tokyo, 11/13. |
| LEMON OIL Clirus & Albed Essences 12 dms (4921 lbs) |
| (American Angle) Services 11/20. |

haven, 11/13.
METANILIC ACID FREE DYE INTERMED Jocana 120 bgs

(1186 bs) (Atlantic Conveyor) Liverpool, 11/6. METHYL CELLULOSE Mitrans 195 dms (24074 bs) (Hon-Jin New York) Yokohama, 11/9.
METHYL ESTER Henkol 1 tnk (43166 lbs) (Rouen) Rotter dam. 11/13.
METHYL METHACRYLATE BUTADIENE ST M & T
Chamicals 2000 bgs (90521 lbs) (Ace Accord) Yoko-

(5512 lbs) (Aliantic Conveyor) Liverpool, 11/6
MONOBUTYL META CRESQL 3M6B Stolt Tank Contain-

(35595 lbs) (Dart Britain) Felixstowe, 1 1/12. N DIMETHYLANILINE 78 dms (36365 lbs) (Clarence) Bre-

NICKEL SULFATE Alloychem 800 bgs (40177 lbs) (E R Brussel) Bramen, 11/17 NICOTINAMIDE FEEDGRADE Vitachem 800 bgs (44821

bis) (Dert Britan) Antwerp, 11/12.

NITROCELLULOSE DHL Reliance Cambbean 20 dms (0 bs) (Sea Land Express) Rotterdam, 11/14.

NITROCELLULOSE DHM Reliance Cambbean 10 dms (0 bs) (Sea Land Express) Rotterdam, 11/14.

NITROCELLULOSE DHX Refiance Cambbean 65 dms (0 lms) (Sea Land Express) Rotterdam, 11/14.

(American Hawafi) Santos, 11/14.

ORTHO DIANISIDINE DIHYDROCHLORID Bemo Shpg
190 dms (31718 lbs) (Ming Sun) Kobe, 11/12.

ORTHO NITROCHLOROBENZENE Prochimie Intl 2 con ORTHO NITROCHLOROBENZENE FISSEN, 11/8.
(8334 hb) (Atlantic Conveyor) LaHavre, 11/8.
ORTOFORMIATO DE TRIETILOTEOF Nestor Reyes 1

iba) (E R Brussa) Felixatowe, 11/17.
PARA TERTIARY BUTYL BENZALDEHYDE American
Pacific Lines 80 dms (41006 ibs) (Hansh New York)
Keelung, 11/9. PARACETAMOL POWDER 720 bgs (46032)

10.
18 pit (40873 lbs) (Dart Britain) Felixatowe, 11/12.
PARAFFIN WAX Astor Wax 18 pit (45913 lbs) (American Georgia) Reflection, 11/10.
PERITONEAL DIALYSIS SOLUTION Delmed 8735 cs

Continued on Page 44

CHEMICAL MARKETING REPORTER

# CHEMICAL PRICES

**WEEK ENDING DECEMBER 19, 1986** 

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

An index of weekly chemical market reports

إ .				Afumina, activat
. 1	<b>A</b>			40,000
Ť	. /1			calcined, bulk 100-lb. bgs.
. !				hydrated, wh
: }				sis 1004b.bgs.
: ]	Ables aiba, dmskilo	24.00	27.00	Aluminum aceta works
ij	Acetaldehyde, 99%, tanks, irt. alld. lb.	.37	-	Aluminum chlork
4	Prices to higher in West. Aceteminophen (see N-Acetyl-p-aminoph	nemoli)		600 lb. frt. equi
ł	Acetanilde, tech, flaked, bgs, t.J., f.o.b.	1.29		bulk, same ba
ï	works	.25	-	semi-bulk bind Aluminum chior
•	Aceticanhydride, tenks, divd. E lb.	.4372	-	tanka, v
1	Acetic anhydride prices 1c. higher in W Acetoaceteniide, dime., t.t., divd ib.	1.29	_	ret. dms., c.l., non-ret. dms.,
	Acetoacet-o-anisidide, dms., t.l.,	2.70	_	Aluminum form
-	divdb. Acetoacet-o-chloroanliide, dms., t.l.,		•	Al <sub>2</sub> O <sub>3</sub> t. Aluminum hydra
1	dvdib. Acetoacet-o-toluidide, dms., t.i.,	2.85	-	Atumbum hydr
	d/vdlb.	1.58	-	75-lb. d Aluminum metal
	Acetoacet-m-xylidide, dms., t.i., divdb.	3.33	_	pigs.,
	Acetone tanks divd. E lb.	.25	-	bilg Aluminum oxide
ł	divd. Zone 2 (Calif.)	.27	-	Aluminum pg stoih
3	ing Calif.)	.27	-	alvd
	Acetonitrië, tanks, frt, alld lb. Acetophenetidin (see Phenacetin).	.53	.541/2	lining, extra-fi Aluminum phen
:	Acetophenone, tech., tanks, f.o.b.	78	95	klio dm
٠	workslb.	.76 2.15	. <b>85</b> -	Aluminum powi Uring, 2
-	N-Acetyl-p-aminophenol, c.i., t.i.	5.95	9.64	extra rins, lini
٠	works	5.83	8.64	Atuminum stear Atuminum suifa
	pressed, 12½-lb. bgs. c.J., 1.L. Int. extra	.96	_	bgs., c
j	100%, 25-lb. ogs., same ba-		_	basia 1 Coasts
	sis	.951/2	-	West C
ij	workslb.	.97	-	iron-free, d
-	Acetylselicylic acid, USP (see Aspirin). Acetylinbutyl citrate, bulk, I.o.b.			basis Kq., tanks, sa
ij,	works	1.28	-	Aluminum sulfe
	worksb.	2.06	-	Aminoacetic ac
4	Acrolein, tech., tanks, works ib. Acrylamide, solid, t.l. works ib.	.62 1.00	-	tech., t.l., sar p-Aminobenzo
	soln , 100% basis tanks, works ib.	.74	.77	more,
	Acrylic acid, glacial, rag., tanks, divdib. tech., tanks, frt. alidib.	.67	-	2-Amino-4-chic
	tech., tanks, frt. alkl	.60 ,391/2	-451/a	Aminoathyl eti collect
3	Acrylonitrie-butaciene-styrene resin,	100.0	1-10/4	N-Aminoethyl p
t	high-impact, nat., t.l., dms., divdb.	1.09	1.12	frt.col 2-Amino-2-ei
ŀ	medium-impact, nat., same basis ib. iow-impact, nat., same basis ib.	1.05 .98	1.08 1.01	dms.,
1	Adipic acid, resin grade, bulk, hopper		1.01	
	cars, frt. equaldib. bgs., i.i., c.l. frt. equaldib.	.57 .59	-	
:1	Ager USP, powd., 60 to 100 mesh.,	9.50	0.06	
	dins		9.85	
4	works	,38 .57	- .59	
4		.57	-	
	C-16 to C-18, tanks, divdib. Aldehyde, C-6, dmsib.	.60 4.10	5.70	THET
ï	C-7, ornsib.	1.95	-	THET
·	C-8, dms	4.30 3.75	6.30 4.25	e/eiphe
.:	Alcan (see Sodium aktinate )		-	alid./allov emorph./d
١.	۵	3.72	3.83	AMP/Ame
!	Alkali blue prices 1c. higher W. of Rockies.			point anhyd./ar
ŀ	Atispice Guatemalan / Honduran,			anhyd./ar AOAC/As Official
1	bgs	.97 1.05	Ξ	Official Chemin
- 1	Allyl alcohol, lanks, f.o.b., Bayport, Tex	.90	_	a.p.a./awa phoric
1	Allyl bromide, 500-kilo dms. 2,000 ibs.		-	approx./s artif./artif
.)	or more, works	6.50 3.90	4.50	ASTM/AT
	Allyl chloride, tanks, I.O.b. works lb.	.65	-	ety for Materi
ż	Aliyi isothlocyanata, bots	6.40 yde.)	6.90	11
P	Almond oil, nat. bitter, NF 1.1.p.a. bots	3.50	3.60	b/beta
ļ	sweetb.	1.24	1.50	Be/Baum
	Aloe, Cape, cs	2.00 2.25	2.75	bbls./bar b.g./bels
į.	Curacao, kgs	2.60		bgs./bag bis./bale
.,	Alom, NF, dms	3.00 8.00	6.70	t bote/bot
:.	Alum, ammonium, tech. gran., bgs., cl.,tl., works 100 ib.	' 35.00		b.p./bolfi b.p.l./boi
ij	FCC power, fiber dms., works100fbs	55.00	<u> </u>	of lime b.r./bollin
Ÿ	Alum, potassium, tech gran bgs., c.l., t.l., works 100 lbs.	35.00	.00	bxe./box
j	FCC powd. liber dms., works. 100 lbs.	55.00	-	<del> </del>

- let alas ad fusion acco	sullana k	lata	C.L., f.O.D. WORKS I UUIUS ZO.DU	_
obtained from sup	_		Ammoniac sal. white (see Ammonium chloride comi.). Ammonium biborate, gran., dms., c.i.	
levels at which t	ransacti	ions	worksb90	_
nt bid and asked (			Ammorium biborate powder 15c, per ib, higher.	
			Ammonium bicarbonate, 300-lb. fib.	
nay represent qu	otation	3 OT	dma.c.j. works 100 kb. 20.00	_
ntity, quality and	location	. All III	bgs.ci	_
		. ,	grade, gran, 100-lb. dms., l.t.l.	
opyright.			works	-
			Ammonium billuoride, bgs., t.i.,	
ts is on the back	COVOT	11	works	-
19 19 OII IIIB DAUK	COTOI.	1	Ammonium bromide, dom. NF, gran.,	_
			dms., c.l., t.l., i.o.b. works . lb. 1.31 Ammonium chioride, white, tech.,	-
			fine gran., bgs., c.l.,	
roted gross 100 lb bars			works100lbs. 18.00	_
rated, gran., 100-lb. bgs., 00-lb. mln. c.l., works.ton	821.00	_	USP, gran., dms	.53
uk, same basis ton	354.00	_	Ammonium citrate, dibasic, 250-ib.	
gs., same basis ton	380.00	- 1	dms. f.o.b. workslb. 2.79	-
white, bulk, same ba-			Ammonium dimolybdate, approx. 85%, 24,000 lbs. or more . lb. 5.48	_
	190.00	- 1	Ammonium fluoborate, tech., dms.,	
gs., same basis ton	224.00	-	c.l., t.l., works, frt. equaldlb. 1.79	-
etate, basic, dms., i.c.l.,	3.25	_	Ammonium heptamolybdate, cryst.,	
s	3.23	_	dms., 24,000 lbs. f.o.b.	
b. dma., c.i., t.i., works,		Į.	works	-
ualdlb.	.53	-	Ammonium lauryl suifate, tanks, f.o.b.	20
basis	.48	-	works	.32
ine, same basia ib.	.52	- 1	Ammonium Ilgnin, sulfonate, bulk, f.o.b. Hogulam, Ore ton 72.00	_
ioride, comi., soln., 32° s, works 100 lbs.			Ammonium nitrate, dom., fertilizer	_
s, works 100 lbs.	15.00	-	grede, 33.5% N, bulk, S.E.	
.l., works 100 lbs. vs., same basis . 100 lbs.	12.00 20.00	-	divdton 130.00 13	5.00
rmate, dibesic, Iq. 8%	20.00	_	Ammonium oxelete, tech., fine. gran.	
t.l., workslb.	.55	_	300-lb. dms., t.l., f.o.b.	
drate (see Alumina, hydrate			works	1.68
droxide, oried, gel, NF,			Ammonium pentaborate gran. bgs., c.i., worksb75	
. dms., c.l., t.l., works. lb.	2.75	3.50	c.i., worksb75 Ammonium pentaborate powder 20c.	-
tal, 991/2% or more, 50-lb.			per lb. higher.	
., 30,000-lb. lots, frt.	76	_	Ammonium persulfate, 225-lb. dms,	
b. ide amorphous (see Alumi	18. calcined)	_	24,000 lbs, or more, f.o.b.	
paste, leafing grade,			worksb58	-
lining, 2.400 tb. tots,			55-lb. bgs., same basis lb	
<b></b>	1.40		Ammonium phosphate (see DI- and monoammoniu	m pnos-
a-fine, same basis lb.	1.99	2.14	phates). Ammonium silicofluoride, drns. c.l., t.l.,	
enoisulfonate, purif., 100-	A 10		worksb30%	_
drns., t.lkilo owder, isaling grade, std.	6.48	-	Ammonium suifete, ig. gran., bulk, c.l.,	
a. 2.400 lb. lots, dlvd lb.	3.17	_	workston 80.00	00.08
g, 2,400 lb. lots, dlvd lb. lining, same basis lb.	4.04	_	std., comi., bulk, f.o.b. works ton 60.00	70.00
earate, bgs., c.l lb.	1.25	1.36		20.00
ilirate, comi., grd., 100 lb.			Ammonium suifida, Iq., 40-44% tanks,	
., c.i., works, irt. equald.,			100% basis, frt. equaldton. 460.00 Ammonium sulfocyanide, tech. (see Ammonium thioc	- vanetot
s 17% ALO, East and Gulf atston	206.00	_	Ammonium thiocyanete, tech., cryst.,	yanate).
t Coast ton	220.80	-	bgs., c.l., works b. 1.02	_
N.E. same basis ton	145.00	_	tech soln., 50%, tanks, frt.	
dry, bgs., c.i. same			. equalo.,	-
a ton	300.00		Ammonium thiosulfate, photographic,	
same basis ton	225.00	265.00	60%, tanks, f.o.b. works lb	-
drate, USP, gran., drns. lb. acid. USP, drns., 20,000	-	.337	Ammonium zirconyi carbonate, soin.,	
, I.o.b. works b.	2.12	_	bulkb72 Amyl scetate, primary mixed isomers,	-
same basieb.	1.88	-	tanks, dvd	_
zolo add. 1,000 kilos or			Amyl alcohol, primary mixed isomers,	_
e, dms., f.o.b, works , kilo	9.80	10.10	tanks, frt. alid	-
hiorophenol dry and grd.,	<b>= =</b> 0		Amyl cinnamic aldehyde, dms lb. 2.35	2.60
200 fbs. or more, frt. alid. fb.	<b>5.79</b>	-	p-tert-Amylphenol, bulk, works ib	1.03
ethanolamine, tanks, fri. sct	1.331/2	_	Amyris oil, dmsb. 11.00	<b>-</b> .
yl piperazine, lanks, f.o.b.,	1.0072	-	Anethole, tech., dms kilo 10.20   USP, dms	4.60
collect	1.05	-	Angelica root oil, botskiio 700.00	4.00
-ethyl-1,3-propanediol			Anline, tanks, f.o.b	.351/2
s., t.l. f.o.b. works lb.	1.82	-	Anise oil, dmskilo 6.90	_

works. Ib.
flakes, same basis Ib.
Anthraniic acid, purif., 99% min., dms.,
t.l., frt. alid. Ib.
Antimony fluoborate, ilq. conc., 176-lb.
dms., t.l., works. Ib.
Antimony metal. bulk, c.l., mines Ib.
Antimony oxide, high-tint, bgs., c.l., frt.
alid. E of Rockies Ib.
Antimony trichloride, anthyd, soild,
dms., t.l. works. Ib.
Apomorphine hydrochloride, NF, bots.

divd Ash, black (see Barium suilide).

divd. ... ib.
Azo orange, bbls., divd. ... ib.
Azo yellow, 10 G, bgs., divd. E. of
Rockies ... ib.
Azo G yellow pigmant, bgs., same ba-

Bacitracin, USP, non-sterile, one billio

Bartite-Southern, NY, Bokillo disdivd......kilo
Barite, dry-grd., Southern, off-color,
coarse, bgs., c.l., f.o.b. mines ib.
water-grd., white, bgs., c.l.,
f.o.b. works......ib.
unblesched, extra-fine, pigment

works.....ton anhyd. drums c.l., same basis. ton Barium chloride, purif., cyrst. 400-lb.

ib., dm, c.l., 1.0.b. ib. 1.97

16% starch granulation, white, same basis ib. 2.80

Freight equatd, shipt, identical quantity over standard routes from N.Y., Phila., Midland, Mich., Chicago and St. Louis,

Atropine suilate, USP, bots oz. 10.00 11.00

Avocado oil, dms. ib. 4.00 4.50

.....lb 6.85

# **ABBREVIATIONS**

THE TERMINOL	OGY OF THE
a/elpha alid,/allowed amorph./emorphous AMP/American melting poht anhyd./anhydrous AOAC/Association of Official Agricultural Chemisia a.p.a./available phos- pioric ecid approx./approximately artit./artificial AST M/American Soci- ety for Testing & Materials	C./Centigrade chys./carboys c.c./oubic cen CD/completely attred c.l./cost inau freight c.l./carbad cns./cans coml./commer conc./concen cp/chemically cps./centipols cryst./crystall cs./cases coms./carbon cyls./cylinden
b/beta Be/Baume	d-/dextro

b/t	eta	
Be	Baume s./barrels	
0.0	Joë la-cami	ma
bis bis	i./baga ./bales	
bo	e./bottles	
p.t	/bolling po .l./bona pho	nt aphato ·
- 1	of lime	
D.1	/boiling ran	ge

CHEM	CAL MARKET
meters den-	E/East e.p./end point equald./equalized exp./expressed extr./extracted
ilai ated aure aa	F./Fehrenheit i.a.a./iree alongsk ferment./ferments i.i.a./iree fetty acid i.i.o./iree from chid i.p.a./iree from p alo acid fib./fiber i.o.b./iree on boar i.p./ireezing point irt./ireight
	g-/gamma gal./gailon g.p./general purpo

.p./end point	indust/in
queld./equalized xp./expressed	kga./keg
xtr./extracted ./Fahrenheit	i-/iaevo ib./pounc
a.s./iree alongaide irmant./fermentation f.s./iree fatty scid	i.c.i/leas i.t.i./leaa Rq./liquid
f.o./free from chlorine f.p.a./free from prus- sic acid	m-/meta m.a.p./m
b./fiber .o.b./free on board .p./freezing point rt./freight	point meg./mic mirs./me
-/gamma	min./min molt./mo m.p./mai
al./gellon  .p./general purpose  ren./granular	N/nitroge n-/norme
ird./ground .b.p/iniüai bolling	nat./natu neut./ne NF/Natio
point	No./num

c/incustrial	org./orginary oz./ounce
kegs	P/phosphorus
vo	p-/pera
und	Pac./Pacific
less carload	pf./proof
ea truckload	phos./phosphete
blup	photo/photograph pkgs./packages
etn .	bowq-/bowqeted
/mixed aniline	precip./precipitat
int	prod./producer
microgram	pt./point
/manufacturers minimum	pulv./pulverized
/moiten	purif./purified
melting point	redist./redistilled
	refd./refined refy./refinery
rogen rmei	resub./resublime
natural .	ret/returnable
/neutral	SD/specially den
	34 100

	p-/para Pac/Pacific pl./proof phos./phosphate photo/photographic pkgs./packages powd./powdarad preofp./precipitated prod./producer pt./point	1
	pulv./pulverized purif./purified	1
·. ·	redist./redistified refd./refined refy./refinery resub./resublimed ret./returnable	. ;
·	SD/spec(sily denatured s.d./single distilled SE/Southéast sec./secondary	
_		

ton/refers to said of 2,000 pounds TVA/temporary volun- tary allowance t.w./tankwagens
USP/United States Pharmacopels vis./viscosity
& painters
W/West whee/warehouse w.w./water-white

ed .	W/West	rarahouse	1. 3	•
	. w.w./wa	IIOi-Mina		
t or other	r standard shown in C	of the mi	rterial Marke	į

	Mourtiominal	sec./secondary	٠.	40.14	./		
NOTE: A HOW too In	1 percent of 2,000 points of the the basic donatituent multiple ion of 2,000 points at the same		-1 - 1 -	16	terit of t	he matel	rii in
Derreniene ilmin	hangeur or 5'nnn bornus of th	n pasic coustina	nt or o	iner ateric	in Chair	nical Me	rkenn
Berester at as the or	na ossio coustiment withful	idd by the unit-to	м ргю	e suomi	WI CIRC		3.54
izahoi tet Biade 10e bi	ice of 2,000 pounds of the mate	Hel. (	1 1				_

7				
l	Bulum oxide, grd., dins., c.l.,	) 2E		Borax, to
l	GYO basis 100 lbs.	31.25 30 00	-	bul
	Baruff DBF00008, 700-10- GTT-01	.30	-	tech., բ
	RANUM SIESTALE. OUIK. L th	1 05	-	Boras, NE
ı	Brimstigle, IOCN, ISSE DATE OF THE PROPERTY OF	fixO)		Bone seid
	grade, power, as the lab	.50° 2	-	bulk, Boron tri
l	Batum suffide (black ash), drifts. c.r. 40	50.00		Boron trif
	Sust Egyptian	.67 .88	.95 .90	bulk, si
ı	Basioi Comores	55 00 52.00	-	Boron tr
Į	Belley acid 1.1. 1.0.0., works	52 00	70 75	phenol
1	Manage Mach Dominion or	29.28	- 1	Brontino, bulk, 4
1	Bayol, NF, 50-55%, dims	11.00 2.70	3 00	punf., ( Broning
I	Basswax, rerd., pleatings	3.10	3.20	!
١	white, status, 100-lb. ctns lb. yellow, bricks, 100-lb. ctns lb.	3.05 3.00	3 10 3.10	Bromoch
1	Network stabs, 100-lb. ctnslb.	2.95	3.05	Butadien
ļ	workston	43.50 1.25	-	1,4-But
1	ech_dms, c.l., t.l.,	.73	.83	Butene-1
ļ	the Rockies. Byvere, indust. or nitration, barges, 1.o.b	L		n-Bulyl a n-Bulyl a
1	Beton Rouge, Lagal. Beton Rouge, Lagal.	98 98	-	n-Butyi (
Ì	Beaumont, Tex gal. Catlettsburg, Ky gal.	98 .98	- '	sec-Buty tert-Buty
Ì	Chicago district	.98 .98	-	Butyl at
i	Cairton, Pa	.98 .98	_ '	Butyl b
1	Over Park, Tex	98 1.07	1.13	Butyl chi Butyl c
1	Lima, Ohio	.95 .98	-	n-Butyl
١	Wood River, III		dane) 8.70	Butyl is
	Beztine orange, powd., bgs., dlvd.lb. iq., containers, dlvd ib.	3.36 5.80	3 89 6.05	n-Bulyii n-Bulyii
	Brzdneyellow, AAA, bgs., divd lb. AAOA, bgs., divd lb.	7 35 5.95	7.40 6 20	
	AAOT, bgs., divdlb. Bevoone, USP, drins., 1,000 kg. kots,	10.00	11.50	tanks
	1.o.b.,works kg. Bauchydropyrone, dms lb. Baudcadd, tech., bgs., c.l., t 1., 1.o.b.	12.50	-	Butyl
	works	.55	.58	Butyl of
	sis	1.73 1.80	1.75	tanks p-tert-B
	) Bavophenone, N.F., 1,000 lbs. or	3.50	3.60	Butyl ph Butyl st
	more, f.o.b	7.45	-	1
	lech, 1,000 kilos or more, fob workskgs. 22,6enzobiszył disulfide (see Mercap	4.35	_  - 	Butyl st
	fide).  Brootiszole, flake, dms., 1,000 ibs.	10001120111	azyi disa-	Butylan tort-But
	ormore, (.o.b. works lb. powd., dms., 1,000 lbs. or more,	6.10	-	tanks
	same basis	6.20	-	Butylet
	more, same basis ib. Bezolichloride, refd., dms. t.l., frt.	9.90	-	Butylat
	equeld	.87 80	-	tech.
	inks. irl. squald	.57 .741/2	.59 .75	Butyric
	Benzoyi peroxide, regular gran., 10,000-lb. lois or more, bgs.,			Butyric
	works, int. equald ib.	2.35	6.98	n-Butyi tank
	Salvianatate done	1.71 1.00	1.95 1.25	
	Bouald.	1.26	1.85	
	prop grade, t.l., dms., serge be-	1.37	1.43	
	lanks, same basis	1.40 1.34	-	
	Tanks, same backs, Spring Ottats ID.	1.32 1.26	_	Cadmi
	Brigg chloride, tech., non-ret. cime.	1.66	2.25	Cadmi
	cf., t.l., irl. aquald lib. stat. f.o.b lib. brodernamate, 25-lb. cne lib. Benzel-M M. demonstration	.59 .54	-	light
		8.50	9.96	med
	Bargaformete dese	2.30 10.50	_ =	Cadmi
	CHINISOSPICATION CONTRACTION C	10.00	ol). 	١
	Baryldine event	3.35 2.90	3.25	Cadm
	Beingmoungstates kilo	2.95 44.75	3.25	med
	Biterdiese Des ormore gm.	парптпою і <b>Б.00</b>	5.50	Cadm
	nitrate, purif. cryst., 100-	10.00		Cadro
	Carried Oxychlodda 400 H	10.00	-	Cadn
	ORIGINAL PROPERTY.	17.20	15.60	Cadn
	powd., 226-lb. dms., works, ib. smuth subgeliste, purif., 100-lb. dms., works.	15.31	18.00	de
	subnitrate NF, powd., 200 lb.	10.50 14.45	-	Cadin
	subsalicylate, puril, powd.		<u>-</u>	ligt me
	in mode, reagent, powd., 100-	17.00	15.45	me
	cars, divd.	87		ma Cade
	Barcitxe, syn., imp., bage		-	Cadi
			6.05	Caffe
	Bteamed, dom, bore of	0.00	7.90	.
	prosphate, defluoring ted of		190.00 etanincule:	d m
, r , r , r	Sorat, lech, applyed not been Calcium	phosphate	tribasio).	Cala
7	prik of works to			Calc Calc
			—.	2.71

orax, toch., gran., decahydrate,		ī	Calcium carbida and essential circ	
9872% DQS , C.I., Works ton 237		-	Calcium carbide, std., generator size, bulk, c.l., f.o.b., works, ton 402.	.00
tech., pentahydrale, gran, 991%.	uy	- 1	Calcium carbonate, pulverized, 325-	
DGS., Cl., Works ton 285		-	mesh, bgs., bulk, f.o.b. workston 46	00
bulk, c.1, works ton 220 bras, NF (See Sodium borate).	0.00	-	ailimas, 54% solida, seme	.00
arc acid, tech., gran., 99.9%, bos.		1	basis ton 97	.00
Dulk, C.L., works	1.00 9.00	- 1	72% solids, same basis ton 109 quicklime, gran., Ind., bulk, work-	.27
oron trichloride, CP, 1,800-lb. cyls.,		- 1	8 ton 100	.93
worksb. 3 pron trifluoride, 60-lb. cyls., t.l., (.o.b.	3.60	- 1	Catclum carbonate, coated, bgs., c.l., works	.0830
WORKS	4.03	- 1	Calcium carbonate, precip., bgs.,	.0000
bulk, same basis	3.47	-	cl.,t.l	. <b>00</b>
oron trifluoride, etherate, 500-lb. dms., t.i., f.o.b., works lb.	2.35	. 1	Calcium carbonate precip. medium, bgs.,c.l., works ton 110	1.00
phenolate, 500-lb. dms., t.l., same			precip. dense. bgs., c.i., surface	
ronting, dring , t.l., works	1.65 .87	<u> </u>	treated, bgs., c.l., works., ton 265	.00
bulk, 45,000-lb. min., works b.	.33	.3412	ultrailine, USP, bgsc.i.,workston 217	7.00
punf., t.l., divdb. ronning divd., prices for dms. and bulk ship;	.75 nedW ali	Bocklee	Calcium chloride, conc., reg. grade. 77-	
1c per-lb. higher, Bulk t.t. prices 1	c. to 21/20	-per-lb	80%, flake, bulk, c.l., workston 15	3.00
higher for 30,000-lb. min. and 40 higher for 15,000-lb. min.	c. to 51/20	cper-lb.	100-lb. bgs., c.l., same	
romochloromethene, dms., c.l., f.o.b.			basis	B.00
Midlandb. utadiene, tanks, f.o.bb.	1.12 .121/5	.13		7.00
.4-Butanedio tanks, f.o.b., frt.	.1272	.10	60-lb. bgs., c.1., same basis ton 27	9.00
equaldlb. dms., same basislb.	.80	-	brining grade, 80-lb. bags ton 28 Calcium chloride, liq., 100 percent ba-	5 00
interie-1, lanks, f.o.b. workslb.	.88 .26	.28	sis, t.c., L1., barge ton 9	9.75
·Bulyl acotate, syn., tanks, frt. alid lb.	.521/2	-		8.00
-Butyl acrylate, tanks, frt. alid. E ib. -Butyl alcohol, syn., ferment, tanks,	.69	-	Calcium chloride, USP, gran., 225-lb. dms., t.i., frt. equald ib.	.90
frt. alld	.34_	-	Calcium citrate, purit., 200-lb. dms.,	
ec-Butyl alcohol, syn., tanks, divd. lb. ort-Butyl_alcohol, syn., tanks, divd.	.365	-	10,000 ibs. or more, f.o.b. worksb.	3.82
E	.70	-	Calcium cyanamide, indust., anhyd.	
Jutyl aldehyde (see Butyraldehyde) Jutyl benzyl phthalate, tanks, irt.			drns., works ton 40 Calcium gluconate, USP powd. t.l ib.	1.80 1.80
alid	.59		Calcium hydride, lump, dms., 25-	
Butyl chloride, tanks, workslb. Butyl cyclohexyl phthalate, tanks,	.99	1.00	1,000-lb, lats, works lb.	0.50
divdlb.	.74	-	Calcium hypochlorite, 100-lb. dms., truckloads ship,t. E. of Rock-	
-Butyl ether, dms., c.l., t.l., workslb. Butyl isodecyl phthalate, tanks,	1.85	-	ies	32.40
divdlb.	.35	-	Calcium hypophosphite, dms., bulk, 500 kilos or more kilo	13.75
-Butyl lactate, tanks, f.o.b. works . lb.	1.58	-	Calcium lodate, FCC dris., f.o.b.	
i-Butyllithium, 15% soln., 1,000-1b.			worksb. Calcium lodide, 50-kilo dms., f.o.b.	5.50
basis, divdib.	15.45	-	workskilo	23.65
tanks, 3,000-lb. min., 100% basis, divdlb.	14.75	-	Calcium lactate, NF, powd., pentany-	
Butyl methacrylate, tanks, irt.	QD.	_	drate, dms., 24,000 lbs. or more, f.o.b, works lb.	2.00
equald	.88	-	NF, gran., trihydrate, same basis. lb.	2.10
F	.40	.42 .82	special gran., dried grade, same ba- sis	2.80
Butyl oleate, dist., dms., c.l lb. tanks lb.	.70 .60	.75	Calcium nanhthanata, 80., 4% C8., C.I.,	
o-tert-Butviphanoi, tanks works Ib.	.70	-	f.o.b. plant, E. of Rockles Ib.	.85
Butyl phthalate (see Dibutyl phthalate). Butyl stearate cosmetic, dms., 77 dms.			d-Calcium pantolhenate, USP, 100- 500 kilo lota kilo	12.50
or moreb.	.91 .92	.97 -	di-Celcium pantothenate, feed grade,	
Butvi stearate tech., t.l lb.	.60	.62	f.c.b. frt. alld., 250 kilos or more kilo	8 00
tanks Butylamine (see Mono-,D)- and Tributylam	.55 Ine).	.58	di-Celcium pantothenate, calcium chio-	
lort-Butylamine, dms., c.i., t.i., 1.0.b.			ride complex, feed grade, 160 grams per ib., f.o.b., frt. alid.,	
works	1.31 1.17	_	500 the or more lb.	2.75
Butylated hydroxyanisole, food grade.		0.05	Celcium phosphate, dibasic, feed grade, 18/2% P. bulk, c.l., t.l.,	
dms. dlvdib. Butylated hydroxytoluene, food, feed	8.80	8.85	f.o.b. works ton ?	228.00
grades, c.l., t.l., bgs., divo ib.	1.27	1.40	Calcium phosphate, dibasic, dihydrate, USP, bgs., c.l., t.l., works, frt.	
tech., bgs., c.i., t.i., divd lb. 1.3-Butylene glycol, tanks, divd lb.	1.25 .72	1.38	1 aguste 100 f08.	62.50
Bulyraidehyde, tanks, divd	.291/2	.30	L gerhari LISP same hasis 100 IDS.	71.75 49 90
Butyric acid, tanks, frt. alid fb. Butyric ather (see Ethyl butyrate).	.441/2	-	dentifice grade, same basis80 bs. Calcium phosphate, monobasic.	10 00
Butyrolactone.tanks, 1.0.b. plant Ib.	1.20	_	monohydrate, 1000 gruue,	
n-Butyronitrile, dms., c.l., divd lb. tanks, divd	.93 .54	_	bgs., c.l., 1.l., works, frt. equald 100 lbs.	50.50
(B) No. (440.			l anhud food grade, same ba-	54.95
			tennete NF precip, bgs., c.l., frt.	
				62.50
			Calcium propionate, dms., 2,000 lbs. or more f.o.b. frt. alid lb.	.50
U			Calcium sticata, hydrated, pgs., C.I.,	.07
			Works	.(elino
Cadmlum chloride, purif. cryst., 100-	9 70	_	Calomal NF, Mild COWU., 1997-9-18-1	8.50
ID. dms., Ll., works,	3.73	-		o.ul anhere
			Comphana chlorinated, 67-69% (see Tox	AND DECK
Cadmium, CP, red, dark shade, bbls., 100-lb. lots, frt. alid., E. of	44.00	18 25	Camphor, monobromated, dms.,	
100-lb, lote, Irt. alid., E. Di	11.33 9.16	16.35 12.06	Camphera chiorinated, 67-0978 (888 107 Camphor, monobromated, dms.,	3.63
100-lb, lote, Irt. and., E. or Rockles	11.33 9.16 10.69		Camphon chlorinated, 07-05% gees 10. Camphon, monobromated, dms., kgs.,, b., Camphon, syn., tech., 185-lb. dms.,	
100-lb, lots, Irt. and., E. or Rockles	9.16	12.08	Camphene chlorinated, 07-09-5 (see 1 or Camphor, monobromated, dms., kgsb. Camphor, syn., tech., 185-lb. dms., 5,000 lbs. or moreb. USP, cowd., 185-b. dms., 5,000	3.63
100-lb. lote, Irt. and, E. of Rockles	9.16 10. <del>6</del> 9	12.06 15.20	Camphor, monobromated, 07-09-8 (888 for Camphor, monobromated, dms., b., camphor, syn., tech., 185-b. dms., 5,000 bs. or more	3.63 1.80 2.30
100-lb. lote, Irt. and., E. of Rockles lb. Rockles lb. Ight shade, bbis., same basis. lb. medium shade, bbis., same basis. lb. medium-light shade, bbis., same besis lb. Cadmium, CP yellow, all shades, bbis. To Joulb, lose, frt. alld., E. of	9.16 10. <del>6</del> 9	12.06 15.20	Camphere chlorinated, 07-09 stees 1 to Camphor, monobromated, dms., kgsb. Camphor, syn., tech., 185-lb. dms., 5,000 bs. or moreb. USP, powd., 185-b. dms., 5,000 b. lots or moreb. syn., refd., 1-02, tablets, chs. 1,000-	3.63 1.80 2.30 3.64
100-lb. lote, frt. and., E. of Rockles	9.16 10.69 10.26 6.10	12.06 15.20 14.50	Camphere chlorinated, 07-09 s tests 1 to Camphor, monobromated, dms., kgs	3.63 1.80 2.30 3.6 1.6 2.0
100-lb. lote, frt. aid., E. of Rockles	9.16 10.69 10.26	12.06 15.20 14.50	Camphene chlorinated, 07-09's teser for Camphor, monobromated, dmskgsb. Camphor, syn., tech., 155-lb. dms, 5,000 lbs. or moreb. USP, powd., 155-lb. dms., 5,000 lb. lots or moreb. syn., refd., 1-02. tpblets, clns. 1,000-lb. lots or morelb. Camphor oil, yellow, 25-lb: dmslb. write, dmsb.	3.63 1.86 2.36 3.5 1.8 2.0 2.8
100-lb. lote, frt. and., E. of Rockles	9.16 10.69 10.26 6.10	12.06 15.20 14.50	Camphene chlorinated, 07-09 stees 1 to Camphor, monobromated, dms., kgs	3.65 1.80 2.30 3.5 1.6 2.0 2.8 17.5 1.9
100-lb. lote, frt. aid., E. of Rockles lb. light shade, bbis., same basis. ib. medium shade, bbis., same basis. ib. medium-light shade, bbis., same basis. ib. Cadmium, CP yellow, all shades, bbis., 100-lb. lote, frt. alld., E. of Rockles lb. Cadmium fluoborate, iq. conc., drss., t.l., works, frt. equald b. medium-light shade, bbis., same basis.	9.16 10.69 10.26 6.10 2.27 3.22	12.06 15.20 14.50	Camphene chlorinated, 07-09's teser to: Camphor, monobromated, dms., kgsb. Camphor, syn., tech., 155-lb. dms., 5,000 lbs. or moreb. USP, powd., 155-lb.;dms., 5,000 lb. lots or moreb. syn., refd., 1-02. tpblets, clns. 1,000- lb., lots or moreb. Camphor oil, yellow, 25-lb: dmsb. white, dmsb. spec. grav., 1,070, dmsb. Cannaga ofl, indonesian, dmsklo Candelita wax, crude, bgsb.	3.65 2.30 3.5 1.6 2.0 2.0 17.5
100-lb. lote, frt. alid., E. of Rockles	9.16 10.69 10.26 6.10 2.27	12.08 15.20 14.60 7.07	Camphene chlorinated, 07-09 stees 1 to Camphor, monobromated, dms., kgs. b. Camphor, syn., tech., 165-lb. dms., 5,000 lbs. or more b. USP, powd., 185-lb.;dms., 5,000 lb. loits or more. lb. syn., refd., 1-02. tablets, cins. 1,000-lb. loits or more. lb. Camphor cil, yellow, 25-lb: dms. lb. write, dms. lb. spec. grav., 1,070, dms. lb. Cansngs of, indonesian, dms. kdo Candellia wax, crude, bgs. lb. refd. pure, bgs. lb. Gaprio edd, comi, pure, dms. lb.	3.65 1.86 2.3 3.6 1.8 2.0 2.0 17.5 1.9
100-lb. lote, frt. aid., E. of Rockles	9.16 10.69 10.26 6.10 2.27 3.22	12.06 15.20 14.50	Camphene chlorinated, 07-09 stees 1 to Camphor, monobromated, dms., kgs. b. Camphor, syn., tech., 185-lb. dms., 5,000 lbs. or more lb. USP, powd, 185-lb. dms., 5,000 lb. lots or more lb. syn., refd., 1-02, tablets, clns. 1,000 lb. lots or more lb. Camphor oil, yellow, 25-lb: dms. lb. white, dms. lb. spec. grav., 1,070, dms. lb. Cannage oil, indonesian, dms. kilo Candelita wax, crude, bgs. lb. refd. pure, bgs. lb. Caprio adde, comi, pure, dms. lb. Caprio adde, comi, pure, dms. lb. Caprio addenyde (attenyde C-10) dms.,	3.65 1.86 2.36 3.65 1.66 2.0 2.8 17.5 1.9 2.1
100-lb. lote, frt. aid., E. of Rockles	9.16 10.89 10.26 6.10 2.27 3.22 4.60 1.20	12.08 15.20 14.60 7.07	Camphene chlorinated, 57-69-s teser to: Camphor, monobromated, dms., kgs	3.65 1.86 2.30 3.5 1.8 2.0 2.8 17.5 1.9 2.1 .6 .8
100-lb. lote, frt. aid., E. of Rockles	9.16 10.89 10.26 6.10 2.27 3.22 4.60	12.08 15.20 14.60 7.07	Camphene chlorinated, 07-09 stees 1 to Camphor, monobromated, dms., kgs. b. Camphor, syn., tech., 155-lb. dms., 5,000 lb., or more b. USP, powd, 155-lb.; dms., 5,000 lb. lots or more b. syn., refd., 1-02, tpbtets, clns. 1,000-lb. lots or more lb. Camphor oil, yellow, 25-lb: cms lb. white, dms. lb. spac, grav., 1,070, dms. lb. Cansaga oil, indonesian, dms. kilo Candelita wax, crude, bgs. lb., refd. pure, bgs. lb. Caprio addelyde (attenyde C-10) dms., cns. lb. Caprolectam monomer, flake, bgs., 11., 1,0.b., shipping point lb.	3.63 1.80 2.30 3.6 1.6 2.0 2.8 17.5 1.9 2.1 .6
100-lb. lote, frt. aid., E. of Rockles	9.16 10.69 10.26 6.10 2.27 3.22 4.60 1.20 2.10	12.08 15.20 14.50 7.07 - - 1.50	Camphene chlorinated, 07-09-s teser to: Camphor, monobromated, dms., kgs	3.63 1.80 2.30 3.6 1.6 2.0 2.8 17.5 1.9 2.1 6.6 3.9
100-lb. lote, frt. aid., E. of Rockles lb. light shade, bbis., same basis. ib. medium shade, bbis., same basis. ib. medium-light shade, bbis., same basis. ib. lb. lb. lb. lb. lb. lb. lb. lb. lb. l	9.16 10.89 10.26 6.10 2.27 3.22 4.60 1.20	12.08 15.20 14.50 7.07 - - 1.50	Camphere chlorinated, 07-09-s (see 1 to Camphor, monobromated, dms., kgs	3.63 1.86 2.3 3.6 1.8 2.0 2.0 2.0 17.5 1.9 2.1 6.6
100-lb. lote, frt. aird., E. of Rockles	9.18 10.69 10.26 6.10 2.27 3.22 4.60 1.20 2.10	12.08 15.20 14.50 7.07 - - 1.50 - 4.00 4.80	Camphene chlorinated, 07-09-s teser to: Camphor, monobromated, dms., kgs	3.63 1.80 2.30 3.6 1.6 2.0 2.8 17.5 1.9 2.1 6.6 3.9
100-lb. lote, frt. aid., E. of Rockles lb. light shade, bbls., same basis. lb. medium shade, bbls., same basis. lb. medium-light shade, bbls., same basis. lb. cadmium. CP yellow, all shades, bbls., 100-lb. lote, frt. alid., E. of Rockles lb. Cadmium fluoborate, liq. conc., dms., t.l., works, frt. equald lb. medium-light shade, bbls., same basis lb. Cadmium-mercury lithopone, maroon shade, bbls., frt. alid. E. of Rockles lb. Cadmium metal ingote or sticks, ton lots, cs., divd lb. Cadmium nitrate, purifi., flake 400-lb. cms., cl., t.l., f.c.b., ship. pt.lb. Cadmium-selenide lithopone, orange, light shade, bbls., same basis lb. Cadmium-selenide lithopone, red, dark shade, bbls., same basis lb. Cadmium-selenide lithopone, red, dark shade, bbls., same basis lb.	9.16 10.69 10.26 6.10 2.27 3.22 4.60 1.20 2.10	12.08 15.20 14.50 7.07 - - 1.50	Camphere chlorinated, 07-09's teser to: Camphor, monobromated, dms., kgs	3.63 1.80 2.30 3.6 1.6 2.0 2.8 17.5 1.9 2.1 6.6 3.9
100-lb. lote, frt. aird. E. of Rockles	9.18 10.69 10.26 8.10 2.27 3.22 4.60 1.20 2.10 3.97 4.47 6.77 5.27	12.08 15.20 14.50 7.07 - - 1.50 - 4.00 4.50 5.80 5.80	Camphor, monobromated, 07-09's test for Camphor, monobromated, dms kgs	3.65 2.33 3.66 1.60 2.00 2.00 17.55 1.90 2.11 6.60 3.90 8.80 8.80 8.80 8.80 8.80 8.80 8.80 8
100-lb. lote, frt. alid., E. of Rockles lb. light shade, bbis., same basis. lb. medium shade, bbis., same basis. lb. medium-light shade, bbis., same basis. lb. cadmium. CP yellow, all shades, bbis., same basis. lb. Cadmium fluoborate, liq. conc., dms., 100-lb. lote, frt. alid., E. of Rockles lb. Cadmium fluoborate, liq. conc., dms., t.l., works, frt. equald lb. medium-light shade, bbis., same basis lb. Cadmium metal ingots or sticks, ton lots, cs., divd lb. Cadmium metal ingots or sticks, ton lots, cs., divd lb. Cadmium nitrate, purifi., flake 400-lb. cms., o.l., t.l., f.o.b., ship, pt.lb. Cadmium-selenide lithopone, orange, light shade, bbis., 400-lb. lots. fri. slid. E. of Rockles lb. Cadmium-selenide lithopone, red, dark shade, bbis., same basis lb. light shade, bbis., same basis lb. medium light shade, bbis., same basis lb.	9.18 10.69 10.26 6.10 2.27 3.22 4.60 1.20 2.10 3.97 4.47 6.77 5.27 5.72 6.37	12.08 15.20 14.50 7.07 - - 1.50 - 4.00 4.50 6.80 5.30 6.75 6.40	Camphere chlorinated, 07-09-s tees to Camphor, monobromated, dms., kgs	3.63 1.86 2.33 3.6 1.6 2.0 2.6 17.5 1.9 2.1 6.6 3.9 8.8 8.8 8.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9
100-lb. lote, frt. aird. E. of Rockles b. light shade, bbls., same basis. ib. medium shade, bbls., same basis. ib. medium-light shade, bbls., same basis. ib. cadmium. CP yellow, all shades, bbls., 100-lb. lote, frt. alid. E. of Rockles ib. Cadmium liuoborate, liq. conc., dms., t.l., works, frt. equald b. medium-light shade, bbls., same basis ib. Cadmium-marcury lithopone, marcon shade, bbls., frt. alid. E. of Rockles ib. Cadmium metal ingots or sticks, ton lots, cs., divd ib. Cadmium nitrate, purit., flake 400-lb. clas., cs., t.l., f.o.b. shp. pt.lb. Cadmium-selenide-lithopone, orange, light shade, bbls., same basis. ib. Cadmium-selenide lithopone, red, dark shade, bbls., same basis. ib. Bight elvade, bbls., same basis. ib. medium light shade, bbls., same basis. ib.	9.18 10.69 10.26 8.10 2.27 3.22 4.60 1.20 2.10 3.97 4.47 5.27 5.72 6.37 7.47	12.08 15.20 14.50 7.07 - - 1.50 - 4.00 4.50 6.80 5.30 6.75	Camphor, enonobromated, 07-09-s (see 1 to Camphor, monobromated, dms kgs	3.63 1.80 2.31 3.5 2.00 2.6 1.9 2.1 6.6 8.8 3.9 2.1 1.9 1.9 1.9
100-lb. lote, frt. aild., E. of Rockles lb. ight shade, bbis., same basis. ib. medium shade, bbis., same basis. ib. medium-light shade, bbis., same basis. ib. Cadmium, CP yellow, all shades, bbis., 100-lb. lote, frt. alld., E. of Rockles lb. Cadmium fluoborate, iq. conc., drss., t.l., works, frt. equald b. medium-light shade, bbis., same basis cadmium-mercury lithopone, maroon shade, bbis., frt. alld. E. of Rockles lb. Cadmium metal ingots or sticks, ton lots, cs., divd lb. Cadmium nitrate, purif., false 400-lb. clas., cl., t.l., f.o.b., ship. pt.lb. Cadmium-selenide lithopone, grange, light shade, bbis., same basis lb. deep shade, bbis., same basis lb. ibght etsde, bbe., same basis lb. lbight etsde, bbis., same basis lb. medium light shade, bbis., same basis lb. medium alade, bbis., same basis lb. medium alade.	9.18 10.69 10.26 8.10 2.27 3.22 4.60 1.20 2.10 3.97 4.47 5.27 5.72 6.37 7.47	12.08 15.20 14.50 7.07 - - 1.50 - 4.00 4.60 5.30 5.75 6.40	Camphor, monobromated, of -0-9's test for Camphor, monobromated, dms kgs	3.65 2.33 3.66 2.00 2.86 17.56 2.1 6.6 8.8 8.8 11.1
100-lb. lote, frt. aid., E. of Rockles lb. light shade, bbis., same basis. lb. medium shade, bbis., same basis. lb. medium-light shade, bbis., same basis. lb. medium-light shade, bbis., same basis. lb. Cadmium. CP yellow, all shades, bbis., 100-lb. lote, frt. alid. E. of Rockles lb. Cadmium liuoborate, liq. conc., dms., tl., works, frt. equald lb. medium-light shade, bbis., same basis lb. Cadmium-marcury lithopone, marcon shade, bbis., frt. alid. E. of Rockles lb. Cadmium mitrate, purit., flake 400-lb. lots, frt. alid. E. of Rockles lb. deep shade, bbis., same basis. lb. Cadmium-selenide lithopone, orange, light shade, bbis., same basis. lb. Cadmium-selenide lithopone, red, dark shade, bbis., same basis. lb. medium light shade, bbis., same basis. lb. medium light shade, bbis., same basis. lb. medium light shade, bbis., same basis. lb. medium selenide lithopone, red, dark shade, bbis., same basis. lb. Cadmium-selenide lithopone, wellow, sill. cadmium-selenide lithopone, vellow, sill. cadmium-selenide lithopone, vellow, sill. cadmium-selenide lithopone, vellow, sill. cadmium-selenide lithopone, yellow, sill. cadmium-selenide lithopone, sill. cadmium-selenide lithopone, yellow, sill.	9.18 10.69 10.28 6.10 2.27 3.22 4.60 1.20 2.10 3.97 4.47 6.77 5.27 5.72 6.37 7.47	12.08 15.20 14.50 7.07 - - 1.50 4.00 4.50 6.80 5.30 6.40	Camphor, monobromated, 07-09-s (see 1 to Camphor, monobromated, dms., kgs. b.  Camphor, syn., tech., 155-lb. dms., 5,000 lbs. or more b.  USP, powd, 155-lb. dms., 5,000 lb. lots or more b.  syn., refd., 1-02. tpbtets, clns. 1,000-lb. lots or more lb.  camphor oil, yellow, 25-lb: dms. lb.  white, dms. lb.  Camphor oil, yellow, 25-lb: dms. lb.  white, dms. lb.  Cansangs off, indonesian, dms. kilo  Candelita wax, crude, bgs. lb.  refd. pure, bgs. lb.  Caprole oid, comi, pure, dms. lb.  caprole oid, comi, pure, dms. lb.  caprole didelyde (atiehyde C-10) dms., cns. lb.  Caprole didelyde (atiehyde C-10) dms., cns. lb.  Caprole oid sed. 92-99% tanks, lb.  Caprole oid sed. 92-99% tanks, lb.  Capsicum (see Pepper, red).  Capsicum (see Capsicum oleonasin).  Capsicum oid (see Capsicum oleonasin).  Capsicum oid (see Capsicum oleonasin).  Capsway oil, Potand, dms. lb.  Carsway oil, Potand, dms. lb.	3.63 1.86 2.3 3.5 1.6 2.0 2.1 1.9 2.1 5.7 7.7 11.9 17.2 2.1
100-lb. lote, frt. aird. E. of Rockles b. light shade, bbls., same basis. ib. medium shade, bbls., same basis. ib. medium-light shade, bbls., same basis. ib. cadmium. CP yellow, all shades, bbls., 100-lb. lote, frt. alid. E. of Rockles ib. Cadmium liuoborate, liq. conc., dms., t.l., works, frt. equald b. medium-light shade, bbls., same basis ib. Cadmium-marcury lithopone, marcon shade, bbls., frt. alid. E. of Rockles ib. Cadmium metal ingots or sticks, ton lots, cs., divd ib. Cadmium nitrate, purit., flake 400-lb. clas., cs., t.l., f.o.b. shp. pt.lb. Cadmium-selenide-lithopone, orange, light shade, bbls., same basis. ib. Cadmium-selenide lithopone, red, dark shade, bbls., same basis. ib. Bight elvade, bbls., same basis. ib. medium light shade, bbls., same basis. ib.	9.18 10.69 10.26 8.10 2.27 3.22 4.60 1.20 2.10 3.97 4.47 5.27 5.72 6.37 7.47	12.08 15.20 14.50 7.07 - - 1.50 4.00 4.50 6.80 5.30 6.40	Camphor, monobromated, of -0-9's test for Camphor, monobromated, dms kgs	3.63 1.86 2.30 3.6 1.6 2.00 2.00 2.17.5 1.9 2.1 1.9 3.9 8.8 8.8 8.8 17.5 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11

 $\{(x,y)\in \mathcal{G}_{k}(\mathcal{F}_{k}(y)) \mid \{(x,y)\}_{k=1}^{k} \} = \{(x,y) \in \mathcal{F}_{k}(y) \mid \{(x,y) \in \mathcal{F}_{k}(y)\} \mid \{(x,y) \in \mathcal{F}_{k}(y)\} \}$ 

# 

0	.1600	ITRIVEJ				
445		WEEK ENDING DEC. 19, 1	986			
150		Carbon black, low structure, bulk, c.l.	-		I	
•	-	works	.240 .270	.260 .290		
225	i.00	intermediate-super-abrasion (ISAF)b.	.25	-		
	_	bgs.,c.l. works	.28 .31	_		
	_	bgs.,cl., works	.4050	-		
	_	workslb. bgs.,cl., workslb.	.210 .240	=		
	- !	Carbon black, thermal, medium, bgs. c.l., worksb. bulk, c.l. works	30 .32	.30% .34%		
	-	Carbon black oil, barge, f.o.b. Gulf re-	10.50	12.50		•
	_	f.o.b. W. coast refineries bbls. Carbon desuifide, t.c., f.o.b. works ton 4	10.50 20.00	12.50		
,	_	Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld ib.	.36 .31	-		
!	-	tech., dms., c.l., t.l., frt. elid ib. tank transport (min. 4,000 gals.) frt. elid ib.	.24	_		
) 45 <sup>4</sup>	0.00	iri. siki	68.00	-		
) 1	3.25	Cardemons, decort, Guatemalan ib. green, Guatemalan, bgs ib.	2.90 5.75	7.50		
		Camilne, No. 40, NF, bulk, 190-lb. lots or more, divdb. 1 Carnauba wax, Parnahyba, No. 1, yel-	35.00	140.00		
, 5 1	4.50	low, bgs., ton lots	1.95	2.05		
, ,	-	North Country, No. 2, refined, bgs.,	1.75	1.90		
- 5 2	25.65	Carnauba wax, North Country No. 3,	1.55 1.10	1.65		
		centrifuged, bgs., ton lots . 1b North Country, No. 3, refined, bgs., ton lots	1.30	1.45		
0 B	-	ton lots				
0	-	b-Carotene, in vegetable oil, semi- solid auspension, 400,000 A units	90 7E			
5	-	per gram., 33 lbs or morelb b-Carotene, liq in vegetable oil, 500,000 Aunits per gram , 33	32.75	•		
0	-	bs. or moreb. b-Carotene, dry, beads, 10%, 167,000	40 75	-		
0	8.50	d-Carvone, 25-lb, dms., synlb	26 85 48.00	-		
		I-Carvone	7.06 1 00	7.25 -		
5	-	Casein, imp., acid-precip., grd. 30- mesh. Australian, edible. samebasis c l.l !b	1 45	_		
00	_	Australian, indust, same basis c.t. b. Cassella acid, 303 mol. wt., dms., frt	1.365	-		
	_	alid , 100° basis lb.	3.70	. Ta		
50 75	_	Cassia. Konntji " A" bgs lb. "B" bgs lb. Cassio oii, Chinese, dms lb.	1.08 .90 18.50	1.20 .9: -		
90	-	Castoroil, raw, No. 1, Braz. tanks . ID.	32 74	.34	1	
E0.	_	refd.deod., 5-9 dmsib.	.78 .75	-		
50 95	_	dehydrated, bodied, tanks ID.	.74 65 1.10			
50	_	Castor oil, adds dehydrated, dms. ib. ricinoleic add. ib. Castor pomace, bgs., container load,	.791	/2 .B	3	
50	.65	f.o.b., Miami, Fla ton Castoraum, nat., cns	154.00 18.00	35.0	0	
.07	-	syn., cns. b. Catechol, CP, 45-kilo dms., 50-239 dms., 1.o.b. kilo.	11.00 7.93	_		
)}. .50	_	tech., bgs., f.l., same basiskito. Ceustic potash (see Potash, caustic).	3.71	-		
90 <b>9</b> ).		Caustic soda (see Soda, caustic). Cedariesi oli, dms	17.50		•	
.63	3.70	Cedarwood oil, Texas, dris., cns., ib.	1.75 4.75 5.25	-		
.80 .35	-	Cedrol, prime dms	4.25	5.5	30	
.50	_	Cellulose acetale, powd., bgs., i.i.,			•	
.65 200	-	Cellulose acetate butyrate, powd.	1	, .		
.65 .50	2.85	17% butryl content, bgs., LL, divd. E	1.59			
.90 2.10 .60	_ .65	I SOAL NI MOLEON MANUELLE IN INC. INC. III NO.	. r.g:		•	
.60	.65	65% butry content, bgs., dwd. E Ib. Cellulose gum, pure, high vis., bgs., 24,000-b. jots or more works.		0 1.	70	
3.95	5.35	std., low or medium vis., bgs., c.l. t.l., f.o.b. Hopewell, Va bb Certum concentrate CeO <sub>2</sub> , 50 fbs., . ib	1.8	D 1.	.90	
.87 ,85	=				<u> </u>	ŀ
.35 .73%		vorksb 77% CeO <sub>2</sub> , dms., worksb Certum oxide, optical grade, bgs., 50	4.2	Ō 1	.60	
.,		Ib. lots or more, divd	. 1,0		.90 .27	
1.00	-	Charlomae flowers, Hungarian, cs., it	. 4.2		.50	
9.00	18.00	Roman, 08	2.7	rO 8	.00	
7.00 2.00 .54	25.00	Chamomile off, blue, Egyptian	b. 370.9 b. 15.0	90 00	-	1
.50		Chicago acid, dry, nos-, inc. and.	o	<b>5</b> 0	-	
212 242		Chlorendic anhydride, tech., dms., t. works. Chlorinated parallin, 40% chlorin	b. 1.	30	₹«.	
.207 237		50% chiorine, same basis	Б.	45 48	461/2 471/2	1
.230		80% chlorine, same basis 70% ohlorine, resincus, 60-	10	469 <del>/</del> 89	.481/2	

CHEMICAL MARKETING REPORTER

CHEMICAL MARKETING REPORTER

December 22, 1986

# CHEMICAL

A: :::::::::		T	CMC, technical, 96% minimum, low or medium vis., bgs., 24,000 lbs.,		
CHEMIL	٠A		f.o.b. Hopewell, Va., 100% basis	1.25	_
CHEMIC	ıμ		detergent makers, f.o.b. manufac- turing point	.64	_
BRIANA			CMC, purif., high vis., (see Cellulose gur Coatter pitch, indust., liq., works . ton.	n). 250.00	255.00
<b>PRICES</b>			roofing, 140-155, Federal specifica- tion RP-381 Type 1, bulk		
LUIAES		- (	workston Cobelt acetate, dms., t.i., frt. alidib.	350.00 3.61	4.25
MIESK ENDING DEG 46	1000		Cobalt carbonate, powd., dms., frt. alld	6.61	8.16
WEEK ENDING DEC. 19	1986		Cobalt chloride, dms., 5,000 lbs. or more, ft. equaldlb.	4.15	_
Chlorinated paraffin, Zone 2 prices are 1 Zone 3 prices are 2c per ib. high:			Cobalt hydrate, dms., t.l., frt. alid ib. Cobalt metal, 99.5-99.9%, 250-kilo.	8.20	10.55
are 5c per lb. higher Chlorinated rubber, 5, 10, 20 cps., bgs,			dms., f.o.b. NY, Chicagolb. Cobait naphthenate, liq., 6% Co.,	11.70	-
Ll., divd	1.66 1.92	<del>-</del>	dms., divd	2.0 <del>6</del> 2.74	_ 3.45
125 cps., bgs., t.l., divd	2.60 2.75	<u>-</u>	Cobalt oxide, Imp., black, 72-73%	9.51	_
Chlorine, tanks single units works, f.o.b., frt. equald ton	195.00	200.00	Cobalt exide, imp., 70-71% Co lb.	9.78	-
Chloroacetic acid, mono, high purity, flake, 99% bulk f.o.b.			Cobalt phosphate powd. 32.1% Co., dms., dlvd	1.36	-
workslb. 2-Chtoro-4-aminotoluena, tech., hq.,	.56	-	[ d/ms	.381/2	-
dms., c.l., t.l., f.o.b. works . ib. o-Chloroanilne, liquid, dms., c.l., f.o.b.	1.88	-	Cobait auffate, cryst., bgs., 10,000 lbs. or more, frt. alid. E lb.	2.81 4.58	3.54 6.02
worksb. tanks, same basis	1.63 1.55	-	monohydrate, dms., frt. ald lb. Cobalt talate, 5% Co., dms., dlvd lb.	2.16	.45
p-Chloroaniline, solid, c.l., t.l., f.o.b. lb. flake, drns., c.l., same basis ib.	1.70	=	Cocola butter, spot	.40 2.05	-
o-Chiorobenzaldehyde, dms., t.l., worksb.	2.45	_	Coconut oil (See Oils, Fats & Waxes man Coconut oil acids, distilled, t.c.,		
p-Chlorobenzeidehyde, dms., 2,000 lbs. or more, worksb.	3.84	3.85	f.o.b	.52 .54	.68 .63
o-Chlorobenzoic acid, dris. (11. wks ib. p-Chlorobenzoic acid, dris., 500-lb.	3.90	-	Cod oil, f.o.b., Gloucester, Mass., bulkgal.	6.50	-
lots or more, workslb. Chloroform, tech, tanks, distr. divdlb.	1.69 .34%	2.25	Codelne sikaloid, NF, 25-kilo lots, .kilo. Codelne phosphate, USP, cns., 25-kilo	900.00	-
tech., consumors, tanks, divdib. NF tanks, min., consumer, 4,000	.341/2	-	Codeine sulfate, NF cns., 25-kilo	640.00	-
gels. divd	.351/2	-	lotskilo Codiveroli, NF, dmsgal.	775.00 6.50	7.25
modity basis, dms., t.l.,	3.06		Copalba balsam, dmslb. Copalba oil, cns., dmslb.	1.50 3.75	-
powd, same basisb.	3.15	_	Copper scetate, monohydrate, cryst., tech., dms., t.l., works lb.	.71	.74
4-Chloro-2-nitroanline, paste, 172.5 mol. wt., commodity basis,	2 25	_	Copper bromide, (cupric) 200-lb, dms., 100,000-lbsper-year con-		
dms., t.i., f.o.bb. powd., same basisb.	2.25 . 2.70	=	tracts, works	1.34	-
o-Chlorophenol, dms., c.l., frt. equaldb.	2.00	2.40	danse, 50-lb. bgs., c.l., t.l., works 100 lbs.	108.30	_
p-Chlorophenol, dms., c.l., frt. equaldlb. Chloropioni, coml., 1,600-lb. cyls., t.l.,	1.25	1.70	light, fluffy, 50 lb. bags, c.f., t.l., works 100 lbs.	109.30	_
f.o.b. works	1.25	-	Copper chloride (cuprio), enhyd., c.l., works,	.90	_
Chierosulfonic acid, tanks, frt.	.1872	-	Copper cyanide, tech. dms., 24,000- lb. fots or more	2.30	2.6
p-Chlorotoluene, tech., tanks, worksb.	1.00	-	Copper fluctionate, (cupric), fig. conc., dms., t.l., works, frt.		
Cholecalciferol, dry, 40,000,000 units per gram, kilo lots gm. Choline bitarirate, cryst. 98% min., 50	24.00	-	equald	.82	-
kilo dina , t.o.b. Springileid,	6.90		dm., frt. equald ib. Copper metal electrolytic wire bars,	6.50	-
Mo.,	0.50	•	divd., domestic, basis ib. Copper naphthenate, ilq., 8% Cu.,	.621/2	-
Rockles	.28 .39	-	dms., frt. alid	1.19	-
Choline chlonde, 60% dry supplement,	.39	-	dms., t.l., works lb. Copper cleate, solid, 8% Cu. dms.,	4314	-
bulk hopper cars lb. bgs. 50,000 lbs. min lb. Choline chloride, pharmaceutical, 50	.40	=	works int alidb. Copper oxide, black (cupric), dms.,	.97	-
kilo, lots, f.o.b. Springfield,	5.00		80,000 lb. lots, workslb.	1.21	-
Mo	5.00	-	(, (AA), 80,000-lb. lots, works	1.19	1.2
50 kdo lots, f.o.b. Springfield, Mokllo. Chrome green. CP extra light, bgs.,	6.00	-	red, 90%, Type 2, same basis ib. Copper-8-quinclinolate, 10%, liq.	1.15	-
divid. E. of Rockies	1.68	-	emulsion, i.l., divdib. Copper sulfate, cryst., pentahydrate,	2.52	-
medium, bgs., same basisb. extra deep. CP., same basisb.	1.70 1.72 1.74	-	99% bgs., c.t., f.o.b. works 100lbs.	48.45	_
Chrome orange, CP, bos., dlvd, E, of		~. .89	CP, pentahydrata, cryst., dms., l.c.l., works	60.00	_
Rockles	.83 1.09	1.18	monchydrated, 35% Cu, drns., c.1, works 100 lbs.	_	_
Chromic acid, 9933%, flake dms., c.l., fri. equald	1.18	1.10	basic, bgs., c.i., works 100 lbs. Coriander oil, USP, dms b.	88.30	34.0
grd., same basis	1.25	Ξ	Corlander seed Moroccan ib. Rumanian	.36 .36	-
500-2,000-lb. kds, workslb. Chromium fluoride, dms., t.i.,	.10	-	Com oil (See Oils, Fats & Waxes marke Com oil, crude, foots (soapstock), 95%	report).	
works	.81 1.45	_	acki; New Yorkib. Corn oil ecki, dmsib	.134	ا. و
10% metal soln. 500-b dms. same bass	.74	.86	tanks	70	
Chromium oxide, hydrated, 50-lb.	5.50	_	works 100 lbs Cortisone acetate, USP, dms., 5 kilos	. 11.22	11.7
pure, bgs., c f lb. Cinnamic aldehyde, cns., dms lb.	1.80 1.85	2.00 1.95	Or more	BO	renort '
Cinnamic alcohol, 25-fb. cns	4.50 1.00	1.05	Cottonseed oil (See Oils, Fets & Wexe Cottonseed oil, acidulated (soes	s market re	port.)
Cinnamon bark oil, bots	105.00 2.65	110.00	stock), acid, 95%, tanks	19	_
Citral, na1., dms	5.50 3.18	6.65	Contonseed oil acids, dist., dins b	63	
10. CMB., t.l.,	1.19	-	tanks	. 6.00	R
Citric scid, USP, anhyd., gran. 250-b. dms., t.l., delb.	.86	-	Cream of tarter (see Potassium biteria Creasote, coalter, grade 1, tanks	ete).	0.
Citric acid anhyde, powder bc. higher Citronells oil, Java, dms	2.50	-	1.o.b. works	l. 1.16	
China dms	2.50 3.85	7.40	p-Creskline, fused, dms., works it m-Cresol, 95-98%, dms., t.l., f.o.b il	4 91	•
Citronellol drums, f.o.b	3.68 5.50	6.50	tanks, same basis m.p-Cresol, 99%, dms., t.l., f.o.b	). <b>1.6</b> 5	
Citronelyl formate, 25-lb cnslb. Civet artif., borslb	6.85 20.00	Ξ	buk, same basis o-Craso, 99% pure, dms., t.l., i.o.b., ii	. A2	! .
nat	400.00 49.00	-	bulk, same basis	)75	
Tenn. ton dom, crushed, moisture-repei-		-	bulk, same basis	075	i
lent, bulk, c J, Tenn ton Clay China (see Kaofin). Cleaners, naphtha, 140° liash tanks.	24.00	-	buk, same basis	b96	
New Jersey or New York, divdgal.	1.40	_	content above 25%, resin ar tricrosyl phosphate grade	vd	
Ciova leaf oil Indonésian, reg. dms. kito Madegascar, reg kito	3.15 3.40	<u>-</u>	tanks, int. ald	b58	}
Clove bud pil	25.00	26.00	25% or less, tanks, frt, alid, i		

MC, technical, 96% minimum, low or		Cuba root, powd., 5% rotanone, basis. 50-lb. bgs., 1.l., works lb.	.60	_	DI
medium vis., bgs., 24,000 lbs., f.o.b. Hopewell, Va., 100%		Cumena, bulk, contract, f.o.b lb. Cumin seed, Indian, bgs lb.	.15¼ .95	.15 <sup>7</sup> 4 -	D <del>1</del>
basis	-	Iranian, bgs	.99	-	[
turing point	-	equaldib. Cyclamen aldehyde, 50% min. alde-	1.16	1.37	DI
celter pitch, indust., liq., works .ton. 250.00 roofing, 140-155, Federal specifica	255.00	hyde content, dms lb. 96.5%., dms lb.	4.85 7.35	- 9.20	Di
tion RP-381 Type 1, bulk workston 350.00	_	90-92% drnsib. Cyclohexane, bulk, barges, wksgal.	7.85 1.08150	1.09150	DI
cobelt acetate, dms., t.l., frt. alid lb. 3.61 cobelt carbonate, powd., dms., frt.	4.25	Cyclohexanol tech., tanks, 1.0.b ID.	.52	.6612	ים
alld	8.16	Cyclohexanone tech., tanks, 1.0.b.	.55\2 .565	.581/2	D
more, ft. equald	10.55	tanks, divdib. Cyclonexylamine, tech., tanks,	.85	_	
cobalt metal, 99.5-99.9%, 250-kilo. dms. f.o.b. NY, Chicago lb. 11.70	~	worksb.	.00		N
cobait naphthenate, liq., 6% Co., dms., dlvd	-				D
cobalt nitrate, dms., t.l., frt. ald lb. 2.74 cobalt oxide, Imp., black, 72-73%	3.45				N
Co	=				١_
obalt phosphate powd. 32.1% Co., dms., divd	-	2,4-D acid, tech., 50-b. bgs., c.l., t.l.,			D
cobalt resinate fused, 3% Co., dmsb38½	-	works, frt. squald 1b. 2,4-D butyl ester, tech., 55-gal. dms.,	1.10	1.25	000
cobalt suifale, cryst., bgs., 10,000 lbs. or more, frt. alid. E lb. 2.81 monohydrate, dms., frt. alid lb. 4.58	3.54 6.02	C.I., L.I., works, frt. equald lb. tanks, same basis	1.30 1.25	-	0
obait talate, 6% Co., dms., dlvd lb. 2.16	.45	2,4-D dimethylamine salt, 1.c., t.t. works, irt. alldgal.	8.05	_	0
ocoa butter, spot		Decyl alcohol, mixed isomers, tanks, divdb.	.32	_	١,
oconut oil acids, distilled, t.c., f.o.b,	.68	perfume grade, dms lb.	.75	-	`
double distilled, same basis lb	.63	Defluorinated phosphate (tricaldum), feed grade, 16% P, c.l., bulk, f.o.b, works ton 19	95.00	228.00	[
bulkgal. 6.50 odelne alkafold, NF, 25-kilo lots, kilo. 900.00	-	Denatured alcohol, sthyl, CD18, CD19, tanks, divd. E gal.	1.87		١,
odelne phosphate, USP, cns., 25-kilo lots	_	NOTE: Tankear sales require written auth and Tobacco Tax Division.		by Alcohol	١,
odeine sulfate, NF cns., 25-kito lotskilo 775.00	_	Denatured alcohol, ethyl, SD2B, tanks, divd. Ega).	1.81	_	1
odiver oil, NF, dms	7. <b>2</b> 5 -	SD3A, tanks, divd. E gal.	1.76½ 1.86	=	ין
opalba oil, cns., dms	-	SD23A, tanks, divd. E gal. SD23H, tanks, divd. E gal. SD29, tanks, divd. E	1.89 1.83	-	
tech., dms., t.l., works lb71 opper bromide , (cupric) 200-lb. dms. ,	.74	SD29, tanks, divd. E gal. SD30, tanks, divd. E gal. SD35A, tanks, divd. E gal.	1.721/2 1.881/2		ľ
100,000-lbsper-year con- tracts, works	_	Denatured alcohol, ethyl, brucine formula	1.83	_	
opper carbonate, 55% Cu, dark, dense, 50-lb. bgs., c.l., t.l.,		SD40, tanks, divd. E gsi. ethyl, optional formula, SD40, tanks,	1.821/2		
works	-	divd, E, gal. For anhyd, alcohol on above formulae, pri			ł
works	-	West Coast divd. prices are the same			l
opper cyanide, tech. dms., 24,000-	-	except in Idaho, Oregon and Was differentiation tankcars is maintain	red.		1
ib. lots or more	2.62	Desoxyephedrine hydrochloride (See Me drochloride)	unanipi v	outiline Hy-	l
dms., t.l., works, frt. equald	-	Detergent alkylate, straight chain do- decylbenzene, tanke, barges,	.45	_	١
dm., frt. equald ib. 6.50 Copper metal electrolytic wire bars,	-	f.o.b	28.04	_	1
dvd., domestic, basis ib	-	white, paper bgs., c.l., works 100 lbs.	27.43	_	1
oma., frt. alid	-	Dextrose, anhyd., coml., bgs., c.l., divd. New York 100 lbs.	41.10	_	
dms., t.l., works	-	USP special, 100-lb. bgs., c.l., divd. New York 100 lbs.	46.50	_	
works frt alld b97 Copper oxide, black (cuprio), dms.	-	Dextrose, hydrated comi, bgs., c.l., divd. New York 100 lbs.	24.25	_	١
80,000 lb. lots, works lb. 1.21 red (cuprous), dms., 97%, USN Type	-	Western zone 100 lbs. Diacetone alcohof, acetone free,	25.60	-	١
V, (AA), 80,000-lb lots, works	1.20	tanks, divd	.52 9.25	15.00	١
red, 90%. Type 2, same basis ib. 1.15 Copper-8-quinolinolate, 10%, liq.	-	Diammonium phosphate, fert. grade. mln. 18% N, 46% P. bulk, c.i.,			1
emulsion, t.l., divd ib. 2.52 Copper sulfate, cryst., pentahydrate,	-		140.00	145.00	1
99% bgs., c.t., (.o.b., works	-	18% N, 20% P, bulk. c.l., f.o b.	240 00	_	ı
CP. pentahydrate, cryst., dms., l.c.t., works	-		250.00	-	
works 100 lbs. 75.10	-	c.i., t.i., works, frt. equald 100 ibs.	52.50	_	ŀ
Corlander oil, USP, dms	34.00	food grade, bgs., c.l., t.l., same be- sis	57.75	_	
Rumanian	.37	2,4-Di-tert-amylphenol, min. 95,5%, dms., c.i., t.i., works ib.	1.04	_	
Corn oil, crude, foots (soapstock), 95% scid; New York	b .14	tanks, works	.97	-	
Corn oil acid, dmsb,b,	.40	frt. slidlb. o-Dianisidine dihydrochloride, 100%,	7.00	8.00	
Gorn syrup 43 Bs., tanks, f.o.b. works 100 lbs. 11,22	11.43	MW 244, dms., t.t., dlvd lb. 2,8-Di-tert-Butyl-p-Cresol (see Butylated	4.25 hydroxy	rtoluene)	
Cortisone acetate, USP, dms., 5 kilos or more	_	Dibutyi fumarate, tariks, f.o.b. worksb.	.77	.85	ļ
Cottonseed meal (See Oils, Fats & Waxes market Cottonseed oil (See Oils, Fats & Waxes market re	report.) port.)	Olbutyl maleete tanks, f.o.b. works. lb. Dibutyl phtheiste, tanks, works lb.	.63 .64	.64 .60	
Cottonseed oil, acidulated (soap stock), acid, 95%, tanks,	•	Dibutyl sebacate lanks, works ib. Dibutylamine, dms., c.i., divd ib.	1.72 1.12	1.89	
N.Y b	=	tarks, same basis	1.06	-	
Coumerin, NF X, cryst., over 600-ib.	-	worksb.	2.00 1.80	-	
loteb. 6.00 Cream of tartar (see Potassium bitartrate). Creosote, coalter, grade 1, tanks.	6.20	3,4-Dichloroanline, tech. 88%, solid, dms., c.l., l.l., f.o.b. works . lb.	1.46	1.57	
1.0.b. works gal. 1.15		o-Dichlorobenzens, tech., 80%, dms., c.l., t.l., divd	.52	-	
p-Creskline, fused, dms., works ib. 4,31	4 1.17	tanks, same basis	.45 .54	-	
tanks, same basis		p-Dichlorobenzene, graded, 300-lb.	.47	-	
bulk, same basis	_	dms., t.i., f.o.b., frt. equald. ib. tanks, iq., same basis b. 2 ft.Dichoro-d-ritzas allina dms.	.61 .43	.52 .47	
bulk, same basis	-	2,6-Dichloro-4-nitroaniline, dms., 10,000 ibs. or more, works.lb.	3.30	-	
bulk, same basis	_	Dichlorophenoxyscetic scid (see 2,4-D). Dicyclohexylamins, drns., c.l., t.l.,			
bulk, same basis		tanka, same besis	1,35 1,25		
content above 25%, resin and tricrosvi phosphate grades.		Dicyclohexyl phthalate, bga., c.i., t.i.,	1.25		
tanks, int. alki		98%, tanks, works	.35	3 <u>1</u> 3 <u>1</u> 3	
Cresvic acid. dom. metanera content		Digitianolamina, tanka, frt. alid	.34		
Cresylo acid, dom., metapara content 25% or less, tanks, frt, elid, lb	·	i ulbinanciaminė lauryi sulfale, tenkę	1.		
	, -	Diethenolamine lauryl sulfate, tanks, irt. ald	.41 hale)	74 - 15 P	

	-				
Diethyl ca	rbonate,	tankwagon	\$,		
i Laetnyi eina	inciamine.	CP dms., c	<u>.</u> L.,	1.40 1.18	-
lanks, div Diethyl eth	d Anolamina u	ech. 8c. per	lb. Ious	140	-
Dietnyi ext	Wale, dins rks	i., C.L., f.O.	.b. Ih	1 80	_
odoriess	cosmetic	lob. grades, t	I	.69	.86
I Dietnyi Sulia	ite. Ianks I	rt.alld.E ns., c.i., t.	ih.	.971 <u>2</u> .59	-
wo DI-2-ethvihe	rks Exviadipate	(see Dioctyl)	lb. Edinale)	2.48	-
Diethyl tolu Iso	amide. 95-9 mer dms	97% min. me	eta h		
N.N-Dietny	ıı-m-toluldi	ne, tech., II	g.,	2.75	-
l tenk:	s, same bas		lh	3.18 3.10	-
18nks, sa	me basis	3 , G.I., t.I., f.c	lb.	1.15 1.02	-
tanks sar	rks ne basis		lb. lb.	1.83 1.76	-
Diethylbenz Di-2-ethylbe	tene, tanks. Exylezelate	1.0 b. works (see Dloctyl	ib. azelatei	.98	-
Diethylene	glycol, tank:	ite (see Dioct s, clyd. E nobutyl eth	lb.	(818). .2 <del>9</del> 1/2	.311/2
l dr	15 C.L. (rt. 8	alid. E 🗀	. Ih	.65 .57	-
du.	18., C.I., frt. £	noethyl eth	lb.	.64	-
Diethylene	alvool mor	nomethyl eth	1er.	.56	-
l tenks, iri	. <b></b>	alid	. ID.	.62 .54	-
eta	ate, ams., c.	obutyl ether I., divd. E.	. lb.	.80 .72	-
Diethylene	glycol mon ata, dms., c.	oethyl ether .l., frt. alid. E.	ac- lb.	.80	_
tanks, fri Diethylen	i. alid etriamine,	tanks, f.c	.lb. .b.	.72	-
Diethylene	triamine pe	entagostic a	cid,	1.60	1.61
tac	nk- cars,	m salt solut tanktrucks,	frt-	.45	
Digitoxin. U	JSP. imp b	ota gi ton lota	ram	2.60 .32½	3.00
Diglycol str	earate, dms e sulfate, dr	., t.l 118., works	. ID. . Ib.	.62 1.10	.73 1.25
Dihydrostr	eptomycin s y ace tone	sulfate, bulk i , 50-kilo to	klio. otb.	48.00	•
DHsobuty	ketone, ter	i ks, dlvd anks, dlvd. E	. lb.	40.00 .60 .55	- .57
Di-Isobuly	jene, tank	s, f.o.b. Ho	)U5-	.37	-
Di-isodecy	i phinalate,	tanks, divd. tanks, divd.	. io.	.40 .40	.40%
Di-Iso-octy Di-Iso-octy	yl azelate, ta yl phthalate,	inks, divd. E. tanks, divd.	. lb. . lb.	.99 .40	1.07
أها	ld	, dms., c.l.,	. ID.	.6672 5872	-
Di-isoprop	wiamine, dr	ns., c I. divd	. lb.	1.17	-
Dilauryi 3,	3-thiodiprop	amb ,elenok	, t.L,	1.89	
Dill oii, US Dimethyl a	P, dms. Inthranilate.	dms	lb. lb.	7 00 15.80	8 25
Dimethyl I	benzyl carb o.dms	inyi acetate.	. 25- lb.	6.95	-
l w	korks	dms, t.l., f		90	-
l g	al. dms., 1.0	l phosphate b ne, anhyd., d	ID.	1.80	1 90
tanks	.1., divd. E. 3. divd. E		ID. Ib.	1.15 1. <b>07</b>	1.18 1.10
Dimethyl	ether, aero livol	sol grade, ta	ınks, lb.	.38	-
Dimethy	iphthalat vorks	0, LBNKS, I	.o.b	.65	-
1 v	vorka	e, tanks, f dms., c.l., f	, . ID.	2.48	2.68
l v	vorks		. , ID.	.57 .46	-
Dimethyl:	sulfide, tank sulfoxide. te	s, works inks. works	Ib.	.69 .78 .87Vz	-
Dimethyle	scetamide, t amine, 25%	zuik 1.0.D. . soin tanks	. 10. 3. Irl	.631/2	_
40% s	iquald., 100 Nn., (anks. (	% basis irt. equald., 1	00%	.631/2	-
anhyd. N.N-Dime	, tenks, írt. ( athvienilino.	quald	lb.	54% 1.03	:
U.I. dms	)	ide dma C.	160.   <sub></sub> t.  <sub></sub>	1.11	-
tenke	.o.b., works same basis.	h	Ib. Ib.	.57 .49 1.22	:
2,4-Dinitr	'ceniine, to: Iline, orang:	ns-lots, I.o.b. e toner, CP, ockles.	bgs	5.20	-
2,4-Dinitr	rochloroben at 47°. t.l	zene, crysta f.o.b. Char	pzing lotte,		_
2.4-Dirdin	N.C	50-lb. dms	ID. {.Q.b.	.96 1.95	
Digitrolo	Charlotte, N	l.Gtech.	1.o.b.	.30	.43
2,4-Dini	trotoluene works	, dms., c.l.	lb.	1.25	
tanks,	WORKS	e frt. alld. E.	ib.	1.20 ,61 ,99	.70 1.04
Dioctyl a	ZOIBIO, TZITK hihalata IRI	ake divid	iib.	.40	45
Dioctyl	sebeçate, t	9%, tenko,	lb.	1.47 1.13	:
1,4-Dlox	ane, tanks, me basis sudulloi. bi	m. and. c.	ib. divd.	1.21	
Diparte	t	let. tanks.	1.0.b.	1.42 .25	39
sulfate	ria, worke turpentine	derived, tani		25	. <b>.28</b> .⊦
Dip oil (s Diphenh	ee Ter acid ydramine hy dom - 1 Od	oa). /drochtorida. iO-kilo lota.	USP.		24.00
Dishas	dom., 1,∪u divol oo ook	POR C.	, kilo.	20.00 74	,
		,	, ib.	65	in die
					٠. ٠ .

	•								
	ide, tech. grade, tanks . lb.	111	1 20	Epimophrine base, syn., USP, bots.,	<u> </u>		Farris chiorida source anndo 100 co-		
ydenylani	in the position Ib	1 25	-	100-gram lotsgram Epoxy resin, inquid, bulk tanks, dwd. in	.60 1.31	1.41	Ferric chloride, sewage grade, 100 per- cent basis, f.o.b. works, tank		
WU	tanks, works Ib ad, flake, bgs., t.l. f.o.h	1.00	-	Solid, bgs., (1)	1.2872	1.331/2	workston Ferric nitrate, cryst., dms., tJ., f.o.b.lb.	176.00 .64	255.00 -
WO	rks.	7 68	-	Erythorbic acid, powd , gran., 100 lb. das., t.l. or mixed t.l. (.g.b.		-	Ferric oxalate, tech., gran., 50-lb. dm., (.o.b. workslb.	1.65	-
	andlum USP.	2 52		works	4.10	4.25	Ferric oxides (see Iron Oxides). Ferric phoaphate, FCCg insoluble pow-		
gra	A A di isocyanoto.	5.00	5 60	divd., III., Md., Ky., E. States, Minneapolis, N.C., Ohio, St.		1	der, dms, 10,000 lbslb. Ferric pyrophosphate, soluble, purif.,	1.10	1.15
p0l	ymenc, Duk, C.I., Ib.	.91	- 1	Louis, St. Paul, Va., W. Va. Ib. Ester gum, wood-rosin type, dms., c.l.,	.75	- 1	pears, 50-lb. dm lb. Ferric resinate, precip., 6.75% Fe.	1.11	-
propylene	eglycol, (griks, r.o. b	10, 1	.42\/	same basis	.43	.46	dms., ton lots frt. alid lb. Ferric sulfate, partly hydrated, 100-lb.	.45	-
O/	is, c.i., divers	.54 .46	-	divd	.41 .41%	.41½ .42½	bgs., c.l., works ton bulk, works ton	141.00 117.00	Ξ
Dolohigu	unidine, powa., ams., th.	2 92	_	Ethyl acetoncetate dms., c.l., dlvd., tb, tanks, dlvd	1.13 1.05	-	Ferric ammonium citrte, NF, brown, green gran, 100 lb, dms.,		
	aud. Jourea, tech., solid, drns . ., frt. alld	3.11	_	Ethyl acrylato, tanks, frt ald lb. Ethyl alcohol, syn., 190 pf., USP tax	.66	-	2,000 lb. mln., f.o.b. shipping pt	2.00	2.95
n ndecyl p	hihalale, lanks, divd ib.	64 61	.65 .65	free, tanks, divd. E gal. Einyl alcohol, absolute, 200 pf., tax	1.55 free prices 1	_ 2c. hlaher	2c. per pound surcharge for shipments Ferric-arronourn oxalate, fine gran.,	W. of Den	IVBP
a	zene 100% basis, tanks orks	2 75	2 60	than 190 pf., tax free. Ethyl alcohol, fermentation, tanks,			250-lb. dms., t.l., f.o.b. works. E	.42	_
gras, 1	100% basis	3 00 76'>	2.70	f.o.b. works gal. Price range attributable to various sta	1.08 ate tax incent	1,28 ives.	Farric hydroxyethylene dlaminetri- acetic acid, industrial grade,		
Dodecomy	succinic annyonder, dries.	.88	-	Ethyl alcohol, denat (see Denatured alc Ethyl p-aminobenzoate, NF (see Benzo	caine).		sodium salt, soln., 4.5% Fe, t.c., L.t., 1.o.b. works lb.	.55	_
a	nzene (see Detergent Alkylate) nenol, tanks, min. Irt. alki			Ethyl bonzoate, dmsb. Ethyl bromide, tech., 98%, dms., c.l.,		1.50	agricultural grade, sodium salt sotu- tion, 5% Fe, Lc., L t., I.o.b.		
	itar, cartified colors for food,	.48	.53	frt. alid. Eb. Ethyl butyrate, dms	1.35	1.50	worksib. Ferrous fluobarete liq. cono., dms., t.l.,		
ri di	ugs and cosmetics, 100 lb. ndover. frt. prepaid or aild.			Ethyl ceffulose, standard vis., 7 cps. bgs., t.l., irt. equald. E ib.	4.55	-	works, frt. equald ib. Ferrous gluconate, NF, t.I., works E.ib.	2.25	
BLA FD&	C.No. 1	21 20 29 15	22.60 29 22	slandard vis. 10, 20, 45, 100 cps., t.l., irl. equald, E lb.	4.17	4.22	Ferrous naphthenate, Ilq., 6%, Fe.	1.17	-
Cours FD	&C, No. 3	49.50 24.00	65.00 24.50	med-um vis., 50, 70, 100 cps., t.l., frt. equald. E	4.25	-	Ferrous sulfate, moist, bulk, t.l. f.o.b. workston	30.00	) –
Valve FC	08C, No. 5 lb lb	7.45 6.45	7.85 6.75	USP vis., 7 cps bgs., t I., Irt. equald. Eb.	4.60	-	heptahydrate, gran., bulk, t.l., f.o.b. workston		150.0
Date coal	har, certified colors for drugs nd coametics. 100-lb. lots			USP 10,20,45,100 bgs., t.t., frt. equald.Eb.	. 4.59	4.69	monohydrate, gran., bulk., t.l., f.o.b. workston	1 170.00	
ď	hd. IC, No. 5	38.50	_	VSP (medium) 50,70,100 bgs., t.l., Frt. equald. E	. 4.51	-	USP, powd., 400-fb, dms lb. cryst., 250-fb, dms	61	-
lia 8	No.4	42.80 18.85	_	Ethyl chloride, tech., cyls., frt. elid lb.	24	.2812 .2614	Fir oil, Canada dmab. Siberia, dmsb	. 12.76	<b>.</b> –
No. 17	lb.	38.90 38.25	-	Ethyl ethanolamines, mixed. dms., t.l.		-	Fish oil, reid., aikali, tanks, c.llb kettle-bodied, tankslb	32	2 .3
la 22	lb.	12 45 59.95	:	divd Eb	. 1.15	Ξ	ight, cold-pressed, dms., c.llb tankslb	26	
No. 33	&C. No. 7	48.95 21.00	-	Ethyl ether, refined, tanks, f.o.b lb Ethyl hexanoste, dms lb	. 4.25	4.75	Fishmeal, dom., menhaden, 60% protein grd., bulk, 1.o.b. At		_
M. 8	ib.	20.55 48.80	48.85	2-Eihylhexolc acid, dms., c.l., t l., divd E	63	_	f.o.b. Gulf porttor	n 295.00 n 290.00	
10 H	iter, for general use in cloth	35.25	-	2-Ethylhexyl acrylate, straight o	r	_	imp., Chilean, 65% protein min. bulk, c.l., t.l., ex whse., f.o.b	).	•
	and paper dyeing (by Color In- lex Name), i.o.b. works			2-Ethylhexyl alcohol, tanks, divd lb Ethyl lodide, cbys., works lb	35	-	Atlantic and Gulf portstor Fluoboric sold, dms., t.l., works, fri	t	
ABX 1	Bueblack ex. conc	5.75 5.46	Ξ	Ethyl linatool, syn. 55-gal. dms lb Ethyl linatyl acatate, syn., 55-gal	. 10.60	-	equald	3,	
A BI 45	i Alizarine Blu SAP 150% . lb. ) Alizarine Br. Cy G lb.	19.85 14.13	Ξ	dmalt Ethyl methacrylate, tanks, fri	). 10.85	-	delvdlk No. 12, bulk, same basislt	bB	18 .
ABI 11	3 Navy 5R	6.55 22.12	-	equaldlt n-Ethyl morpholine, dms., t.l., fr	). 1.QB	-	No. 22, bulk, same basis lk No. 113, bulk, same basis lk	D 8	9 .
AQr8	11	3.72 4.00	-	alid	o. 2.00- b. 1.92	-	No. 114, bulk, same basis II Fluosilicic acid (see Hydrofluosilicic ac Formaldehyde, 37% methanol free (u	CHO13.	
AOr7	O Wool Or G Ib.	4.30 6.15	Ξ	n-Ethyl-a-naphthylamine, dms worksii	5. 1.04	-	inhibited) divd. gulf !! 44-45% (1% methanol) tank	DV	880
AH 14	3 lb. I Azo Rubine 133% lb.	5.13 8.85	-	Ethyl oxalate (see Diethyl oxalate).  Fibyl parathion (see Parathion, ethyl).			dlvd	D1	1015
A M SE	Scarlet 4R Conc. Bb Fast Red A. Conc. Ib.	5.45 6.85	_	Ethyl silicate dist. (see Tetraethyl orth Ethyl silicate, 40% available SiO	21	1.46	divd	QU	945
AY 17	51 Silk Red 3B Conc lb. 75BNS Conc lb.	4.50 9.75	-	dms., f.l., f.o.b. works	b. 1.39	-	tanks, dvd	101  b3	1055 39
AT 1/	4BNS Cono. Ib.	12.22 5.69	-	N-Ethyl-m-toluidine, tech., liq., dms	D. 3.18	=	dms., same basis	b	44
01113	Tertrazine Ex Conc ib. Zinc Free ib	6.18 16.40	-	tanks, same basie	b. 2.85	2.90	works	ib	361/2 511/2
941	Bismark Brown R Ex. Conc. lb.	4.42 9.55	-	more	D. 13.3V	=	Fructose, cryst., 18,000 kilos or moi	re, No!	90 1
1 57 1	Malachite Green Crystal ib. Methyl Violet Crystals ib. I Rhodamine B Ex ib.	6.80 6.80	-	100 lb. dms., less than 500 lbs 1 Ethylamine (see Mono-Di- and Tri-)	b. 14.00	14.50	Furnaric acid, food grade, bgs. 1.1., t	m. tb. ∴	75¥2
012	Bond Yell SFA 150% 15. Sky Blue 6B Conc. 10.	10.95 10.10	-	N-Ethylaniline, dms., c.l., t.l., f.o.	b. b. 1.66	_	tech. grade, bgs., t.l., f.o.b. f	ID.	
	Conc. 300% Ib.	4.62 9.25 9.45	Ξ	tanks, same basis	D. 1.00	-	Furfural, tanks, f.o.b. Cedar Napk lowe and Balle Glade, Fla.	ib	75
, v.,	East Black GR	2.85 4.28	Ξ	Fitwings contract divd	ib	.23 .18½	Furfuryi alcohol, tanka, I.o.b. Memph Tenn. and Omaha, Neb	ib	72
	200 Hellin Fast Brown BRND	7.23	_	Ethylene bressylate, dms	.b.	18.25			
	20 Nesin Past Green GL Ib.	9.15 7.98	-	works	ib. 7.85	1.305 9.25			
DRE	OFast Red SEL N	6.16	=	Ethyleneciamine tetrascotto acco. t	le- L,	بر مارا -	111		
DR	251 Files Scooler AV	6.85	-	frt. equald	(hr	,46		السو	
W	S Cong 1500	2.47	=	equald	ib32		G sait, dms., fri. slid. 100% basis	lb. 2 kijo 23	.30 .05
	125% Paper Yell 3GX	4.00	_	Ethylene dichlonde, tanks, 1.0	ib17	.17%	Gellic acid, 400-kilo lots	kto 100	
OY	1) Stilbene Vollow GA En	1.75	-	Ethylene glycol, indust., lanks.	ю. 1631	-	LLI, dvd. 125 AOAC test, dms., l.t.l.		.50 .75
. Dy	41 Fast Velton BOL Cone	3.03	-	Ethylene glycol, monobutyl ath	ID:	Va -	150 AOAC test, dms., l.L. 176 AOAC test, dms., l.L.	. D	.85 .95
` Dy:	27 Regin Cont. Val.	9.76	_	Ethylene glycol monoethyl eth tanks, dwd. E.	nu	· <b>-</b>	200 AOAC test, offis, Lt.	.b. 2	2.05 2.10
Dis l	R 91 Pink REL 200% lb.	21.00	=	Ethylene glycol monomethyl eth tanke, dwd. E.		-	250 AOAC test dms. I.L	.ib. 2	2.20 2.30
D81	73 Yellow G	3.65 6.84	-	Ethylene glycol monobutyl ether etale, tenks, irt. eth. E	, 1001	1/2 -	300 AOAC test, oms., Lt.l.	na chlorid	2.50 e).
US.	Y I APINI Danie	. 0.77	_	Ethylene glycol monoethyl ether etate, tanks, it. alid., E.	. 101	i% -	Geraniol, syn., 90-9276, unio.	,ib. 3	3.50
De:	V 26 Bordeaux BV 200%Ib	. 7.85 . 17.25	-	Ethylone glycol monomethyl ether elate, tanks, frt. alld. E	.ib35	.45	syn. 96-98%, oms	D 40	5.75 6.00
V&81	102 Blue GFDA 300% lb	. 10.05 . 22.80	Ξ.	Ethylene cride, tanks f.o.b Ethylene trichloride (see Trichlorosi Eucalyptol, NF, dms. Portugues J	hytene).		Bourbon	. Б. 2	5.00 3.00
76	l lega A	. 4.10	Ξ.	Eucalyptol, NF, dms, Portugues II Eucalyptus diviadors, Chinese Eugenol, USP, dms.	kto 3.30	5 -	Egypt.		2.75 5.44
	k 25 Clive TA Paste	. 6.85		Endayor' nation 1111			Geranyl acetate, on a	. ID. 1	5.44 0.95 6.60
					٠.		Geranyi formate, syn., orra.	. <b>6</b> 1	5.95
						٠	Glisonite, g.p., bark, b.r., 1,0.0.	. ion 18	00.00 00.00
	'					· ·	selects, same basis	. ib.	63 .56
indi	r, lech., 95-99%, dms., t.l k drine, syn. aniwol., USB, 80 ex	. 7.00	<del></del>	Fennel Oil, sweet, USP, chs.	ib. 9.0	O .08	Chinese Gingeroil, Chinese	. kilo 8 . kilo 8	34.00 35.00
line	dine, 85-98%, dms., t.l k dine, 8yn. anhyd., USP, 80-oz bit	s. 7.00 t. L. 1.25	• '	Fennel seed, Egypt	b. 8	7 .95	Ginger clearesin, NF, DOIS	a i	0.00
	less than 1,000 km	- 1.60 - 00.05		Fenugreek seed, Indian, bgs.	0 b		Gleuber a sait (see Solvis dima., c.). Gluconic acid tech. 60% dima., c.)	LL.	. 50

con bould built and a second	.00		cent desis, i.o.d. works, tank	
		1.41	Work8	00
salt (500 Magnesium aulfate).	1.281/2	1.331/2	Fenic nitrate, cryst., drns. tl., fo.b.lb. 84 _	
the neid, powd , gran., 100 lb.			Femic oxalete, tech., gran., 50-lb. dm.,	
ums., t.i or mixed t.i. (.e.b.		1	f.o.b. works	
worksb.	4.10	4.25	Ferric phosphate, FCCg insoluble pow-	
divd., III., Md . Ky., E. States, Minneapolis, N.C., Ohio, St.			der, dms, 10.000 lbs lb. 1.10 1.1	15
Minneapolia, N.C., Ohio, St.		L	Ferric pyrophosphate, soluble, purif.,	
Louis, St. Paul, Va., W. Va. Ib.	.75	- 1	pearls, 50-lb. dm lb. 1.11 -	-
um, wood-rosin (ype, dms., c.i.,			Ferric resinate, precip., 6.75% Fe. dms., ton lots frt. alid lb	
same basis	.43	.46	Gms., ton lots frt. alid lb	-
divdb.	.41	.411/2	Dgs., c.l., works ton 141,00	_
99°a, tanks, dlvd lb.	.411/2	.421/2	bulk, works ton 117.00	-
:eloncatate dms., c.l., dlvd lb.	1.13	-	Ferric ammonium citrte, NF, brown,	
s, divd	1.05	-	green gran. 100 lb. dms., 2,000 lb. min., f.o.b. shipping	
crylato, tanks, frt alld lb. Icohol, syn., 190 pf., USP iax	.66	-		.95
free trinks divd. E gal.	1.55	_ '	2c. per pound surcharge for shipments W. of Denver	.00
alcohol, absolute, 200 pf., tax free	prices 120	c. higher	Ferric-artmonium oxalate, fine gran.,	
man 190 pr., tax Iree.	•	-	250-lb. dms., t.l., f.o.b. works.	
alcohol, fermentation, tanks, f.o.b. worksgai.	1.08	1 20	Eb42   Ferric hydroxyethylene dlaminetri-	-
range attributable to various state (		1.28 88	acetic ecid, industrial grade,	
cohol, denat. (see Denatured alcoho			sodium salt, soin., 4.6% Fe,	
-aminobenzoate, NF (see Benzocalr			t.c., t. t., f.o.b. works lb	-
enzoate, dms	1.35	1.50	agricultural grade, sodium salt solu-	
romide, tech., 98%, dms., c.l., frt. alid. Eb.	.76	_	tion, 5% Fe, Lc., L t., Lo.b. works	_
utyrate, dmalb.	1.35	1.50	Ferrous fluoborate liq. cono., dms., t.l.,	_
cefulose, standard vis., 7 cps. bgs., t.l., frt. equald. Elb,			works, frt. equald , . lb	-
bgs., t.l., frt. equald. Elb.	4.55	-	Ferrous gluconate, NF, t.l., works E.ib. 2.25	-
dard vis., 10, 20, 45, 100 cps.,	4 17	4.22	Ferrous naphthenate, IIq., 6%. Fe.	_
t.l., frt. equald, E lb. ium vis., 50, 70, 100 cps., t.l., frt.	4.17	7,4E	Ferrous suifate, moist, bulk, t.l. f.o.b.	-
equald, Eib.	4.25	-	workston 30.00	_
vis., 7 cps bgs., t l., frt. equald.			heptahydrate, gran., bulk, t.i., 1.0.b.	
Elb. 10,20,45,100 bgs., t.l. frt.	4.80	-	works	0.00
equald. E	4.59	4.69	monohydrate, gran., bulk., t.i., f.o.b. workston 170.00 180	00.0
(medium) 50,70,100 bgs., t.l.,			works,	
Frt. equald. E lb.	4.51	-	cryst., 250-b. dms	-
hloride, tech., cyls., frt. elid lb.	.26	.28½ .26½	Fir oil, Canada dms	-
tanks, frt. ald	.24 41.00	.2017	Siberia, dms	-
ethanolamines, mixed. dms., t.l.,	******		Fish oil, refd., aikeli, tanks, c.l lb	36
dlvd. E	1.23	-	light, cold-pressed, dms., c.l lb34	_
inks, dlvd. E	1.15	-	tenkslb28	-
ether, refined, tanks, f.o.b lb. nexanoate, dms lb.	.46 4.25	4.75	Fishmeal, dom., menhaden, 60%	
/inexolc acid, dms., c.t., t l., divd.	1.20		protein grd., bulk, 1.o.b. At- lantic port ton 295.00	_
E	. <u>63</u>	-	f.o.b. Guif port ton 290.00	-
s divd. E	.57	-	imp., Chilean, 65% protein min.,	
yihexyl acrylate, straight or mixed, lanks, frt. ald. E lb.	.79.5	_	bulk, c.l., t.l., ex whse., f.o.b.	
yihexyl alcohol, tanks, divd lb.	.35	-	Atlantic and Gulf portston. 285.00 Fluoboric sold, drns., t.l., works, frt	-
odide, cbys., works lb	6.25	-	equald	-
inatool, syn. 55-gal. dms 1b.	10.60	-	Fluorocarbon, No. 11 bulk, tanks,	
linelyl acetate, syn., 55-gal. dmelb.	10.85	_	1 delvd	.64
l methacrylate, tanks, frt.	10.02		No. 12, bulk, same basis tb	.74 1.14
eausid	1.08	-	No. 22, bulk, same basis lb. 1.05 No. 113, bulk, same basis lb	.93
iyi morpholine, dms., t.i., irt.	0.00		I No 114 bulk sama basis 10. 1.02	1.08
alid	2.00- 1.92	-	Fluosilicic acid (see Hydrofluosilicic acid).	
ks, same basisib. 1yl-a-naphthylamine, dms.,	1.02		Formaldehyde, 37% methanol free (un-	00
workslb.	1.04	-	inhibited) divd., guif lb088	.09
oxalate (see Diethyl Oxalate).			44-45% (1% methanol) tanks, divd	.10
parathion (see Parathion, ethyl).	onto)		37% (Inhibited 7% methanol,	
silicate dist. (see Tetraethyl orthosil silicate, 40% available SiO <sub>2</sub> ,	Caloj.		1 /00/1	.10
dms., 1.l., 1.o.b. works lb.	1.45	1.46	37% (inhibited 11-15% methano)	.10
tanks, f.o.b. works	1.39	-	tanks, dvd	-
yl-m-toluldine, tech., liq., dms	3.18	_	I dime same basis	-
c.l., f.o.b	3.10	-	Formic acid 90% tanks, r.o.d.	
avlo-toluidine.dm8	2.85	2.90	1 works	_
vanillin 100 lb. dans., 500 lbs. of	12 50	_	95% dms., c.l., workslb51½ Fructose, cryst., 18,000 kitos or more,	
moraID.	13.50 13.75	_	1 dms	1.03
lb. dms., 500 lbs. or more lb. 0 lb. dms., less than 500 lbs lb.	14.00	14.50	Europeic acid. (god grade, 008, 1.1., 171.	77
amine (see Mono-Di- and 111-)			acusid. E	.77
hvianiline. dMS., C.I., L.I., I.O.D.	4.66	_	tech. grade, bgs., t.l., f.o.b. frt. equaldb.	.62
works	1.6 <del>6</del> 1.58	=	Curtural tanks I.O.D. Cegar Napids,	
nks, same basis	1.00		I IOWA BIND BRIER COROCO, I ELL. 10.	-
Tox	.22	.23	I Guefund alcohol tanka I.O.D. Memphis	_
long, contract, divd	.18	.18½ 18.25	Tenn. and Omaha, Neb b72	٠
iene bressviele, dMS	16.00	10.20		
ionediamine, 99%, tanks, f.o.b. works	1.30	1.305		
tonarijemine dihvdikodkio ib.	7.85	9.25		
ionoriamina letrascotio scio, 18-			<b>4</b>	
trasodium sait, Boin., t.C., t. t.,	,36Vz	-		
frt. equald				
ecueld	.38	.46	2.30	_
nke in acuski	.32	.42		-
dana (iichiorida, tarika, t.v.v.	.17	.17%	Galic acid, 400-kub lots kilo 100.00	110.0
worksib. ylene glycol, indust., tanks, frt.		,,.,	Calatto orbita 100 AOAC test, dris.	
ald	.31	-	111 /8//(	1.7 1.8
ylane glycol, monobutyl ather.	.41%	_	125 AOAC test, dms., l.t.l 1.76	1.9
. المستعدد التاريخ الت			. Internation, the land the la	

			1
· 1	WEEK ENDING DEC. 19, 1	986	
•	Glue, bone, extracted, green, jelly-		
	grams, bgs., c.l lb. 85 jellygrams, bgs., c.l., f.o.b lb.	.66	_
<u>-</u> ا	116 jellygrems, bgs., cl., f.o.b lb.	78	-
95	135 jellygrams, bgs., c.l , f.o.b lb.	.77	-
	164 jellygrams, bgs., c.l., f.o.b ib.	.79	-
	192 jellygrams, bgs., c.l., f.o.b lb. 220 jellygrams, bgs. c.l. f.o.b lb.	.87 .93	-
- I	Glue, hide,		
	108 jellygrams, bgs., t.l., f.o.b lb.	.60	-
	135 jellygrams, bgs., t.l., f.o.b lb 164 jellygrams, bgs., t.l., f.o b lb.	.85 .90	-
_	192 jellygrams, bgs., t.l., f.o.b lb.	.95	-
	222 jellygrams, bgs., t.l., f.o.b , lb.	1.00	-
- [	251 jellygrams, bgs., t.l., (.o.b lb.	1.05	-
.	283 jellygrams, bgs., t.l., f.o.b B. 315 jellygrams, bgs., t.l., f.o.b lb.	1.10 1.15	-
- 1	347 jallygrams, bgs., t.l., f.o.b lb.	1.20	_
i	379 jellygrams, bgs., t.l., f.o.b lb.	1.26	-
- I	411 jellygrams, bgs., t.l., f.o.b lb.	1.30 1.35	-
-	444 jellygrams, bgs., t.l., l.o.b., lb. 477 jellygrams, bgs., t.l., l.o.b., lb.	1.40	_
	Glutamic acid, 9912% dms., 100-lb.		
.00	iots, frt. ælid	8.65	-
.00	Glycerine, nat., refd., USP, CP 99V2%	.891/2	_
- '	tanks, divd	.8714	_
-	Syn. 96%, tenks divd lb.	.8914	-
-	Syn. 99.5%, tanks divd lb.	.91	-
.36	Glycine (see Aminoacetic ackl). Glyceryl guziacolate. 1004b. (lb. dms.		
.30	f.o b	14.50	-
-	Glycolic acid (see Hydroxyacotic acid)		
	Giyoxai 40% soin., bulk, tanks, dvdib.	441/2	_
_	Grepefruit oil, Fia., dms	3.00	-
-	Calif., dms	3.00	-
	Israeli	3.00	-
-	Graphite, amorph, powd., bgs., dms., ex whse	.16	.40
	cryst., 88-90%, powd., bgs., dms.,		
-	ex whse	.30	60
.64	Graphite, cryst., 90-92%, powd., bgs . dms., ax whse	.40	.75
74	95-98% powd., bgs., dms., ex		
1.14 .93½	when	60	.90
1.08	Graphile, amorph., cryst., 97% and up.		
	powd., bgs., dms. ax whse	.80	1.20
.0905	Graphite, flake, No. 1, 90-95%, bgs .		
.ouc	ams., ox waso	.65	.75
.1065	No. 2, 90-95%, bgs., dms. ax whse	.65	.75
.1025	Grease (See Orls, Fats & Waxes market		
	Greasooi (See Lardoll).		
.1060	Gualacol, tech., 500-lb dms., 24,000lb min., f.o.b., Wallingford,		
-	Connlb.	2.70	-
_	Gustacwood oil dms	3.75	-
-	Guar gum, edible, bgs., ct., 1.o.b.	.50	.75
-	ship t. pt		
1.03	same basis	.50	.85

2	•	
2	1	
	Н	
	П	

	-		Heliotropin, dmsib.	8.00	0.25
			Hemlock oil (see Spruce oil). Henbane leaves, bisib.	.56	_
<b>7</b> =			Heplane, Indust, tanks, f.o.b. Beau-		
			mont, Texgel.	1.07	-
		;	95%, tanks, f.o.b. Houston,		
			Tex	1.18	-
THE PARTY NAMED IN	Ib. 2.30	_	Heptanoic acid, syn., tanks, f.o.b	.65	-
i salt, dms., frt. stid. 100% basis. Istiic acid, 400 killo lots		-	I-Hexadecanol, syn., tanks, f.o.b lb.	.43%	-
arlic oil, dms., Egyptian	do 100.00	110.00	Hexahydrophthalic anhydride, tech.		
LILUA AMBUR TINI ALJAKI 1834. UIN	10.1		dms., Lt.l., f.o.b. works fb.	1.42	-
111 /8///	10. 1.00		Hexamethylenetetramine, gran. bgs.,		
ARE ADAC AND MITS IT	ED. 1.70		c.i., t.i., works	.55	-
4 CO AOAO (AGE AMA, LLL	N). 1.00		gran. cima., c.l., t.l., workslb.	:59.	-
476 AOAC (08), CITYS., I.C.,	IU. 1.00		pdr. bgs., cl., tl., works lb.	.60	_
AND ANACHOR OTHER LIGHT AND	w		powd, dma, c.l., t.l., works 1b.	.63 1.01	1.1
TOTAL ACTUAL COME. L.C	D. 2.10		Hexane, indust., tanks, works gal.	1.01	6.1
OPO ACAC IONE, CITIES, I.U	, IU. E.E.V		95%, tanks, f.o.b. Houston,	1.12	_
ATE AGAC look diffs. L.L	. E. O.		Tex gal.	.50	Ξ
300 AOAC test, dms., Lt.l.	a chiroldal.		I-Hexanol, syn., tanks, f.o.b lb.	.50	_
300 AOAC test, unto processivity Bentlan violet (see Methyl rossaniir	ib. 5.25	<u> </u>	Hexyl alcohol, mixed isomers, tanks	.32	_
geraniol, syn., 90-92%, dms. nst., 90-92%, dms.	th. 3.50		tanks	.02	
		<b>;</b> -	p-Hexyl methacrylate, dms., c.l., worksb.	.75V±	٠ _
			Hexylene glycol, tanks, divd	.50	
			Hexylesorcinol, USP, dms., 25-lb. lots		
			or more, frt. aid	30.00	_
Count	.b. 22.70	<del>-</del>	Hometropine hydrobromide, USP, 10-		•
		6.00	100-oz.lote, bota 02.	10.26	11.3
m	.b. 5.4 .b. 10.9		Homstropine methysbromide, USP, 10-	,	
			250 oz. lots, bots oz.	9.70	10.7
			Horsebound harb big	.25	
		• .	Hydrazine hydrate, 85%, t.t., frt.		
		0	abd	1.54	-
	In 180.0	Ō '-	65-gal. dms . U., frt. alid lb.	1.61	
selects, same basis Ginger, Cochin, bgs,	lb6	3.65	i Provincio acid, puril., 47%-57%, 2-		. •
	.tb5	8 58	chus (o.b. works 10.	7.50	٠.
Chinese Gingeroil, Chinese	kllo 84.0		Hydroshielyl sicohol, tech., solid		. •
Gingeroli, Chinese Indian	kilo 65.0		1	85	•
		0	.   1enks. f.n.b. zone 1	.80	
Glauber's sait (see Sodium sulfate	(Tr. 198		. F HUMMYNYMMIC ACEL 4078 CHIBs. G.S. G.S.		
			l lob	.38%	1 .
Cancous acts texts on the	.io. , ,	4	Hydrochlorio acid, anhyd. (see Hydroge	n chictice).	٠.
tenics, same Desis					<u> </u>
December 22, 1	and	· CHEN	MICAL MARKETING REPORT	LIL	
December 32.	400	18.	A STATE OF THE STA		

| Madegascar, reg. | kilo | 3.40 | Clove bud od. | Rito | 25.00 | 26.00 | Cloves, Brazil | B. | 2.10 | - Zenzibar | Ib. | 2.10 | - Madagascar | Ib. | 2.10 | - |

CHEMICAL MARKETING REPORTER

intermental indirection of the state of the

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LAE	MICAL
PRI(	FS

LUIAFA		
WEEK ENDING DEC. 19	, 1986	
Hydrochloric acid, 20° Be, tanks, works, East ton	55.00	85.00
Midwestton Guif Coastton	60.00 57.00	70.00
West Coast ton 22° edid, same basis, East ton	90.00	105.00 76.00
Midwestton	68.00	70.00
Guif Coast ton Wast Coast ton	63.50 100.00	115.00
NOTE: Prices vary and are either freight ized depending on producer and	n consci ire diocation.	rgnt equa
Hydrocortisone acetate, micronized, dms., 25 kilos or more . gram.	.70	-
Hydrocertisone, alcohol, micronized, dms., 25 kilos or more . gram.	.70	-
Hydrofluoric acid, anhyd. (sae Hydrogen Hydrofluoric acid, aqueous, 70%	TRUONCI <del>O</del> )	
tanka., f.o.b. frt. equald100bs. Hydrofiuosificic acid, 15-gal. cms., t.l.	43.00	-
works, 30% bas/s ton	-	
tanks, 100% basis, works ton Hydrogen bromide, anhyd. cyla., extra,	190.00	210.00
30,000 lbs., f.o.b. works lb. Hydrogen chloride, anhyd., 50 lb. cyls.,	7.00	-
c.i. works	.65 .62	-
Hydrogen chloride, anhyd., tubo trail- ers, setter's trailer, min.		
100,000 tbs. a year lb. tube trailers, buyer's trailer lb.	.37 .27	Ξ
Hydrogen chłoride anhyd., tanks, workston	270.00	-
Hydrogen cyanide, Itq., 99.5%, tanks, works	.50	-
Hydrogen fluoride, anhyd, tank cars c.l., f.o.b., irt. equaldib.	.6875	_
Hydrogen peroxide, 35% tech., tanks, works, ft. equald lb.	.2325	
50% tankcars, frt. equald lb. 70%, tankcars frt. equald lb.	.3225 .45	_
Hydrogen suifide, fig , 99.25% min. seller's tanks, works	.12	.13
176 lb. cylinders	2.27	-
ers c.l., t.l., divd	2.54 1.95	Ξ
Hydroxyacetic ecid, tech., 70%, tanks, Belle, W. Va	.49Vz	_
Hydroxylammonium sulfate, dms., t.f., l.o.b	.83	_
p-Hydroxybenzene suifonic acid (see p- Hydroxybutyl methylcellulose (visc.		onic acid).
12,000 cps.) 50 fb. bags, tl., ct. 30,000 fb. min , divd., zone		
1ib.  Hydroxycitronellal dimethyl acetal,	2.10	-
dms	16.55	-
f.o.b works lb. Hydroxycitronellal	4.10	-
natural, dms	9.40 13.60	-
e i tra grade, dms	14.80 9.50	-
MYCTOXYETTY METHYCEDUOSE (VISC	2.07	2.12
5,000 through 45,000 cps.) 50 lb. bags, tJ., cJ., 30,000 lb. min., divd., zone 1 lb.	<b>~-</b> ~	
mydroxydrodyl mainylcamiloga, ara	2.73	-
mium, U.S.P. (visc. 4,000 through 15,000 50 tb. bags, t.l., c.l., 30,000 b, min., divd.,		
ZON9 )	2.87	<u> -</u>
hydroxypropyi methylosiulose, U.S.P		
lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1	2.99	-
4,000 through 15,000 cps) 60		
io. bags, t.i., c.i., 30,000 lb. in., divd., zone 1	2.17	-
Hydroxypropyl methylcellulose (visc. 50 through 100 cps) 50 sb.	•	•
bags, t.l., c l., 30,000 ib. min., divd., zone 1 ib. B-Hydroxyquinoline (see Oxyquinoline)	2.64	-
Hypophosphorous acid, purif., 60% dms., c.l., works b.		-
7 <b>.</b> 1977-1		
Ichthammol NF. 200-kilodms ib. Immodiscetic acid, 96% min., dms.,		4.50
c.i., t.i., worksib.	3.00 26.50	=
mosko, 50-kilo ams., 1000 kilos or more. f.c.b. works kilo	17.50	22.00
lodise, crude, dose	19.60	18.00 14.59
lodine USP	,	J
lodoform, NF, dms., 300-lbs., f.o.b.	35.00	45.00
a-fonone, drns b.	24.00 18.20	-
b-lanane, dms	13.10 25.00	-
wholebis	.55	. 60
iron blue, alkeli-resistant, bgs., i.c.i.,		

n, purif., powd., palis, 10-100-lb.	<del></del> -		Lake C, red toner. (red 53) bbls., frt.		
iots	1.00	-	atid	5.70	-
equald	.681/2	.761/2	dms., works	1.18	1.25
equaidlb. on oxide, metallic brown, 1.c.l., bgs.,	.68	.781/2	worksb. tech., (under 2% f.f.a.), 400-lb.	1.15	-
frt, equaldlb. on oxide, nat., red., dom., pure, bgs.,	.13	.15	dms., worksb. Lard (See Oils, Fats & Waxes market repo		113
c.l. worksb. on oxide, yellow,b.	.275 .18	.40 -	Lard oil, No. 1, dms., c.l., f.o.b lb. tanks, same basis lb.	.34 .28	
syn., bgs., c.l., frt. equald lb.	.63	.71	Lard oil, extra, winter-strained, drns	.41	-
on oxide, buff, net., dom, bgs., c.l., t.l., worke, light ib.	.75 .80	.80	tanks, same basisb. prime, burning, dms., c.l., same ba-	.33	-
other shades, bgs., c.i., frt.	.50	.65	sis, Chicago	.43 .35	_
equaldb. atolc anhydride, bgs., f.o.b. works ib.	1.40	-	NOTE: 300 Mi. rad. 1 Vc. higher, except		and We
osmyl alcohol, 95% tanks, frt.	1.44	1.48	Coast, 3o. higher. Laurel leaves, Turkish	3.00 3.85	3.25
obornyl scetate, drnsb.	7.25 .80	1.15	Lauric aidehyde (aidehyde C-12).	.65	.71
obutyl ecetate, solvent grade, tanks. frl. alid	.45	.48	drisb.	7.75	-
obutyl acrylate, tanks, frt. alid. E ib. obutyl alcohol, tanks, divdib.	.71 .29	-	works	1.72 6.50	Ξ
obutytene, 99%, tanks, f.o.b. worksb.	.32	-	Lavender flowers, ord	.65 .80	.75 . <del>9</del> 0
obutyl laobutyrate, tanks, f.o.b. worksb.	.421/2	-	select. bis	1.10	1.19
obutyl methacrylate, tanks, divd ib. obutyl phenylacetate, dms ib.	.87 3.10	3.50	40-42%, ester, cns	9.00 13.00	13.00 14.00
obulyl salicylate, dma lb. obulyraidehyde, tech., dma., c.i.,	3.45	-	Lead acetate, purif., flake. 400-lb. dms., works b.	.46	_
divdlb. tanka, divdlb.	.43 .35	-	tech., flake, t.l., 400lb. dms., worksb.	.37	_
obutyricacid, dms., c.l., t.t., divd lb. tenks, same basis lb.	No Pr .75	rices	Lead blue, basic, sulfate, bbis., c.l., ship,t, pt., f.o.b, b.	.87	_
obutyronitrile, dms., c.l., f.o.b. works frt. collect	.84	_	Lead carbonate. (see Lead white basic ca Lead chloride, 400-b. dms., works. lb.		_
tanka, same basis	.75 5.20	5.60	Lead dioxide, tech., powd., 200-lb. dms., t.l., works lb.	.66	.70
ionlazid, powd kito ionlootinicacid, hydrazine (see Isoniazid	12.00	-	Lead fluoborate, Eq. conc., dms., t.l., works, frt. equald ib.	.65	_
iononyl sloohol, dins., t.l lb. io-octyl sloohol, tenks, divd lb.	.48 .44	-	Lead metal, divdb. Lead monositicate, milled, bgs., c.l.,	.28	-
ophorone, tanks divd	.81	-	f.o.b. worksb. coarse, bgs., c.l., same basisib.	.36½ .37½	=
ophthalic acid, 98%, bulk, f.o.b., Joliet, III., min. irt. aid ib.	.48	-	Lead naphthenate liq., 24% Pb. dms., frt. alid	1.11	_
sopropylacetate, tanks, divd lb.	2.85 .47	Ξ	Lead nitrate tech., cryst., 400-lb. dms., t.l., worksb.	.321/2	-
sopropyi alcohol, anhyd., 99%, tanks, divdgal.	1.38	-	Lead peroxide (see Lead dioxide). Lead red, 95% Pb <sub>3</sub> O <sub>4</sub> , or less, bgs. c.l.,	20	
reid., 95%, tanks, divd gal. reid., 91%, tanks, divd gal.	1.31 1.25	-	worksib. Lead red, 97% Pb <sub>3</sub> O <sub>4</sub> , bgs. c.l.	.38	.38!
sopropyleiher, tanks, divd ib. crude, tanks, divd ib.	.44 .37	-	works	.381/2	.39
sopropylamine. (see Mono-, Di- or Tri-). sopropyl myristate, dms., t.i., Eib.	1.19	1.50	basisb. Lead silicate (see Lead, white, basic silics Lead silicochromate, bgs., c.i.,		_
acomic acid, retd. bgs t ! lb.	1.45	1,48	worksib. Lead suifate (see Lead, blue, basic suif	.35 (ster end )	 
1			basic sulfate) Lead, white, basic carbonate, bgs., c.l.,	au an c	BU, WIII
			frt. alld	1.30	1.40
· ·			same basis	.87	-
			same basis	.85	· -
acid, paste, dms., worke, 100% ba-	4.75	-	ret. dms., l.c.l., worksb. unbleached non-ret. dms., l.c.l.,	.36	-
lapan wax, cs	5.50	5.60	same basis	.34	-
producing point gal. Juniperberry oil, Italian	30.00 115.00	40.00	dms., t.l., workslb. unbleached, non-ret., dms., t.l.,	.28	-
	_		serne basis	.26 15.00	Ξ
		•	Brazil	9.00 8.50	9.50
A			Italian	12.50 11.25	Ξ
			Guaternalan, dmsib. di-Leucine, dms., 1 kilo workskilo Licorice root, whole, bisib.	2.25 60.00 .40	90.00
Kaolin, water washed, fully calcined,			gren., bls	.70 .95	.50 .90
bags c.l., f.o.b. Georgia ton NF pwd., colipidal, bactaria con-	265.00	-	Lignosulfonate (see under Ammonium fonate).	or Sodlun	ı İlginİn i
trolled, 50 lb. bags., 5,000 lb.	.24		Lime, chemical, pebble (quicklime), bulk, 50,000lbs., works, f.o.b.		
Kaolin, uncalcined. No. 1 coating, bulk, c.l., f.o.b., Georgia ton	94.00	<u>-</u> .	plantston Lime, chemical, hydrated, bulk, same	39.00	45.00
No.2 coating ton No.3 coating ton	75.00 73.00		basiston	46.00 54.00	50.00 57.00
No.4 coating ton filler, gen,I purpose, same ba-	70.00	· <b>-</b>	Lime, NF, purif., 100-lb, dms lb. Lime oil, dist., Mexican, dms lb.	.69 8.60	
delaminated water washed, uncal-	58. <b>0</b> 0	. <b>-</b>	. Helttan, dist., dms	6.50 17.50	.=
cined paint grade 1 micron avg. same basis ton	182,00	_	Lime saits (see Caldum). d-Limonene, dmakilo	.70	.86
dry-grd. airfloated soft, same ba- alston	60.00	_	Linatool ex Dols de rose oil, drns b. syn., 98-100% drns., f.o.b. works., b.	6.35 2.93	Ξ
Karaya gum, No. 1, powd., bblslb. No. 2, powd., bblslb.	2.25 1.95	-	Linavi acetate ex bois de rose oil. 90-	7.75	-
Kola nuts, bgsib.	.52	.57	92%, dms	18.00 3.10	21.00
			Linalyi cinnamate, syn., 55-gal. dms. b. Linalyi cinnamate, syn., 55-gal.	8.00	-
			Cinalyl formate, syn., 55-gal. dmsb.	59.85 7.75	8.50
L			Linalyi isobutyrate, ayn., 55-gal. dansb.	6.60	6.56
			Lindane, 20% formulation, dms., divdgai	13.10	-
Lacquer diluent petroleum, 140F			99.9% tech., dms., t.l., dvdb.	6.50	-
200F. b.r., t.c., New Jersey and New York gal.	1.26	_	Linalyl propionate, syn., 55-gal. dmsb. Linden flowers, with leaves, bisib.	7.90	-
Houston, Texesgs). Lacquer diluent, petroleum 200F	1.29	Ξ	Without leaves, bis	.78 .90	.85. 1.16
240F. b.r., tankcars, New York and New Jerseygal.	1.20	1.25	Unseed of fatty acid, dist., down	ket report)	
Houston, Tex	1.12	1.25	Litherge, Com.l., powd., bos., ct.	.60 .53	.67 .62
works	1.08 .62	٠	Lithium bromide, anhyd dos ion	.341/2	4(
tech., 86%, t.c., frt. equaldb. Lactose, edible, reg., bgs., c.l.,	1.03	-	SOUL Same basis	6.27 4.00	
works.	.22	.28 .	Lithum carbonate, powd., bgs., c.l.,		7-14

bbls., frt.			Lithium hydride, c.l., t.l., divd. 10,000 ar	_	
Ib. . 400-lb.	5.70	-	more	23.50	-
lb. ·lb. dms.	1.18	1.25	dms., c.l., t.l., divd	1.93 1.07	-
lb. ), 400-lb.	1.15	-	divd	22.70	-
lb. s market repo		113	lots	3.25	_
b lb. lb.	.34 .28		Lithium stearate, bgs., c.l., frt. alid lb. Lithium sulfate, anhydrous, t.l. divd. lb.	1.01 3.09	-
ned, drns., b	.41	-	Lithol red toner, barium, dms., fri.	3.27	_
same ba-	.33	-	calcium, dms., same basisib. Lithol rubina (oner (red 57), resinated,	3.50	-
lb. same ba-	.43	- 1	dms., irt. alid lb. Litsea cubeba ali, dms lb.	5.60 2.75	-
lb. gher, except	.35 Texas, 2c.,	and West	Locust bean gum, powd., bgs lb. 2,4-Lutidine, dms., t.l., irt. equald. kilo Lycopodium, 50-lb. dms lb.	6.00 5.75	6.75
<u>l</u> þ.	3.00	3.25	1-Lysine monohydrochloride, feed grade, 10,000 lbs. divd lb.	8.00 1.35	10.06
lb. , c.l lb.	3.85 .65	.71	B		1.40
de C-12). b.	7.75	-			
., c.i., l.i., b. %,dms.lb.	1.72 6.50	_	M		
lb.	.65 .80	.75 .90	IVI		
ib.	1.10	1.19	Mace, East Indian, siftings, Ib.	5.40	<u> </u>
kilo	9.00 13.00	13.00 14.00	Slauw #2	5.90	6.00
e. 400-lb. lb.	.46	_	grade bgs., c.l., t.l., works fb. Magnesia, syn., tech., chemical-	.75	.81
)lb. dms., lb.	.37	_	grade, bulk, c.l., t.l. workston	330.00	-
bbis., c.l.,	.87	-	bags, c.i., t.i., same basis ton deadburned, butk, same ba-	365.00	-
vhite basic ca works. Ib.	rbonata). 3.25	_	88ton bgs., same basiston Magnesia pet tech begg 95% 150	392.00 409.00	-
1., 200-lb.	.66	.70	Magnesia, nat., tech., heavy, 85%, 150 mesh, bulk, c.l., t.l., f.o.b.	232.00	_
dms., t.l.,	.65	-	Nev ton 90%, 325 mesh, same basis ton Magnesium bromide, 80-lb. dms., hex-	265.00	-
lb. bgs., c.l.,	.28	-	ahydrate	2.50	-
	.36½ .37½	-	bgs , c.l., t.l., works, frt. equaldb.	.73	.78
Pb. dms., lb.	1.11	-	USP, lite bgs., c.i., same basis lb. USP, heavy, bgs., c.i., same basis lb.	.74 .83	.80
10-lb. dms., ib. oxlde).	.321/2	-	Magnesium chioride, anhyd., 92%, flake or pebble dms., c.i.		
is, bgs. c.l., ib.	.38	.381/2	works. (b. Magnesium chloride, hydrous, 99%,	.1234	.15
bgs. a.i., lb.	.381⁄2	.39	flake, bgs., c.l., worksb. Magnesium gluconate, 100-lb. dms. f.o.b. works, Elb.	.14½ 4.25	-
., c.l., same , lb.	.391⁄2	_	Magnesium hydroxide, NF, powd., dms., c.l., t.l., works frt.		
te, basic silica ogs., c.i.,			equald	.78	-
lb. ve, basic sull	.35 ate and Le	ad, white,	works	.22	.26%
e, bgs., c.l.,	1.30	1.40	10,000-lb. lots or more. f.c.b. Freeport, Tex lb	1.53	1.33
, bgs., c.i , lb.	.87	_	die casting alloys	1 29 .32	-
, bgs., cl., ib	.85	· _	ib. dms., t.l., works lb. Magnesium oxide, USP, light, bgs., c l., works, int. equald lb.	1.65	_
iched, non- rksib. Ims., I.c.I.,	.36	-	heavy, dms., c.l., same basis ib. Magnesium oxide, tech. (see Magnesia)	1.54	•
non-ret.	.34	-	Magnesium phosphate, tribasic, tech 60-lb. bgs., t.o.b lb.	1 00	-
lb. dms., t.l.,	.28	-	Magnesium silicate (see Talc).  Magnesium silicofluoride, bgs , c.l., t.l.	.1645	.1800
lb.	.26 15.00	Ξ	works	.96	1.06
	9.00 8.50	9.50	salls), tech. bgs., t.l worksb.	.14	-
lb. s kilo lb.	12.50 11.25 2.25	Ξ	bulk, same basis	.13	:
rksklio lb.	60.00 .40	90.00 .50	USP, cryst., bulk, same basis . ib. Magnesium sulfate, 17% Mg. (syn-	.1412	-
	.70 .95	. <u>9</u> ŏ	thetic monohydrate), tech. bgs. t.l., works lbs.	.80 1.25	-
Ammonium	or Sodium	ı ilgalıa sul-	CP, same basis ibs. Magnesium sulfate, anhydrous. CP bgs. t.l., works ibs.	1.75	-
(quicklime), vorks, f.o.b.			Magnesium suifate trihydrate, tech., bgs., t.l., works	.45	-
bulk, same	39.00	45.00	Magnesium trisilicate, USP, powd., fib. dms. 5,000-lb. lots	,38	
ton ton 18 ib.	46.00 54.00 .69	50.00 67.00	USP, micronized powd., dms., 376-lb.lotslb.	.83	-
18 lb.	8.60 6.50	=	Malatrion, tech., dms., t.i., works b. Maleic acid. cryst., powd., drums, 100	1.62 3.20	_
	17.50		kilos, f.o.b	2.80	-
msklo	.70 6.35	.86 	Maleic anhydride, bgs., t.l., works, frt. equald lb. tanks, works, frt. equald	.55 .63	.59 -
o. works lb. . dm lb.	2.93 7.75	-	Maiic acid, purif, and food grades. 50- b. bgs., t.l., c.l., divd 90.	.81	.84
rose oli, 90- lb. b. works. lb.	18.00 3.10	21.00	Mandarin oil, Erazilian, dms	17.75 8.00	10.00
gal. dms. lb. n., 55-gal.	8.00	_	lots kilo Manganese acetate, dihydrate, dms., divd b.	.431/2	.48
	59.85 7.75	8.50	tetrahydrate, dms., t.l., dlvd	.48 1.68	1.80
n., 65-gal.	6.50	6.56	Manganese carbonate, chemical	.80	,80
ilon, dms.,	13.10	-	grade, 48% Mn. bgs., 20,000- lb. lote or more, works lb.	1.05	-
m s., t.i., b. n., 55-gal.	6.50	-	Manganese chloride, annyo., dins., 20.000-lb, lois or more lb.	,61	-
	7.90 78	- 85	Manganese dioxide, nat., African, grd., 74%-76% MnO <sub>2</sub> , 100-lb. bgs., ton	200.00	
Ib. ts & Waxes m	./8 .90 arket repo	1.16 ri).	.i., works	250.00	380.00
& Waxee mai dms jb.	rket report) .60	.67	Manganese dioxide, syn., cryst., bat- tery grade, 90%-92% MnO <sub>2</sub> , 100-b. bgs., c.l., works lb.	.70	.677
, bgs., c.i.,	.53	.62	chemical, ferrite grade, same da-	49	.61
., dms., ton 	.341⁄2 6.27		Manganese gluconate, roo grade, 100 h dms. f.o.b. works ib.	3,60 35	. 38 .
	4.00		Manganese hypophosphite, NF, dms.	8.75	
	1.50	eranji.	Mengenese metal disorder Di	3314 8436	5. 17°
	3.82 2.94	1 3.49. 7 2.95	dms., d.l., works.	67	
1.I., divd. 1b.	4.90	5.12	dris. divd.		, ", .

7				_
	remese resinate, fused, 31/2% Min. dms., frt, alld	.3414	-	M
	roce 69-7% Mn. dms	.42		4.
1	25 klobgs., 50-lon cars, divd	280 00 245.00	-	М
1 w	nak hopper cars, same dasston	330.00	-	М
{ k	nganete tellate, ilq., 67a kviri, cirrs.,	.60	-	M
M	m. sad., powd., dms., t.l., works	3.02 .86	.89	a. D
1 .	poen, rieka Egypten	.61 de).	.82	P.M.
	Disea Diphonymetriaria 4,4,4000-ib.	, and to ,	EOV.	
	min., 1.0.b. works lb. b.k.cl., tl., same basis lb. same formaldehyde resin, g.p., t.l.	.51% .50	.59\ <del>2</del> .58	
1	Mad	.55 .461/2	.60	١,
1 -	sis	.12	_	
	<b>Gili ports, same basia </b>	.13	-	١,
	requiar crystals, spot, cs., bulkib. an, USP, recemic, 100-450 lbs. ib.	6.50 9.00	6.75 -	
	Mecaphobenzothiazole, bgs., t.l., works, irt. alld	1.25	1.55	ا ا ا
	dms., works, frt. alkt lb. legate chloride NF, gran., powd., 100-lb. dms., f.o.b., works., lb.	1.33	1.66	۱,
-	dra. f.o.b. workslb.	6.50 7.00	- 7.25	"
1	tech., 100-lb. dms., same ba- salb. yelow, NF, 100-lb. dms., same ba-	5.50	7.00	^
1	salb.	7.00	7.25	\
- \	sis	5.50 iteta USP X\	7.50 ړ	١
- 1	listyloide, tanks, divd	.46	·* -	
-	L, frt. equaldlb. tanta, works, frt. equaldlb. Ellemamphetemine hydrochloride.	.87 .78	Ξ	1;
ļ	dms	12.00 4.50	16.00 7.00	Γ
	ámsib. Milhanol, syn., barges, f.o.b. groducing point. Gulf	4.50	7.00	۱,
	Coest gal. Krismanne (see Hexamethylene tetra Istikalne hydroxyana logue, dry.	.28 :mlne).	-	İ
	owecovity (1., int. alid ib. opuid, 88% activity, t.i. frt.	.86	-	1
	ald	.88	-	
İ	deziera, dimsib.	2.05	-	1
- }	dvd.Eb. left/inbletate, hydrogenated, non- ret. dms., i.c.i., same ba-	9.40	•	
	Kathyl acetoacetate, East, divd.	10.00 .85	-	\
	Well scokel (see Methanol)	66.00	-	
ļ	Kriylanyi elcohol, tanks, divdib. Kriylanyi ketone, tks., divdib. Vithyi anihranilate, tech., dms.,	.55 .54 <i>V</i> ≥	Ξ	1
:	Verylbenzoste, clms., t.l	1.41 .25	2.65	
ļ	bs.min., frt. alid	1.05	_	
1	Sa min, frt, alid b. b. Sa min, frt, alid b. b. Sa min, frt, alid b. b. Sa min, tra alid b. b. sa sa sa sa sa sa sa sa sa sa sa sa sa			
Ì	drd., zone 1 ib. Julykalukse, premium USP (visc.	2.73	-	
}	30,000 lbs., dtvd., zono 1. lb. lenyteliuloss, (visc. 400 through 4,000 cps) 50 lb. lbgs., tl., dl., 30,000 lbs., dtvd., zono 1. lb. lenyteliulose (visc. 15 to 25 cps) 50	2.85	-	١
}	30,000 bs., dwd., zone 1 ib. inhibitiose (visc. 15 to 25 cps) 50 b. bars. (I. cl. 20 050 ib.	2.24	٠-	
	b. bage, tl., cl., 30,000 ib. oin., divd., zone 1 ib. lichyl chloride, Indust. bulk, tanks, 10.b, works	2.62	-	ł
	dioroform tenn 1 1 1 7	2017	.26	
- {	In poresol, dms. Ib	6.00	-	1
1	Work formate, Dura Doggraft dom	3.55	3.80	ļ
	unis, same basis ib		Ξ	1
ì	legistratione, pure, dms	7.30	=	Ì
:	Wildingsybenzoale (see Methy	(nedarada	- 9.40	
:	Mendant II	. 81	-	1
	Owd 2000 2 (Calif.)	38	=	Ì
	land scougenol, 25-lb, cns.	41	10.40	ļ
				1
	10 b. USP 600 kilogram	3, .	_	
	ald, E.	0 8.70	-	
•	kusi yaryiacatata, dma	1.00	5.40	$\lfloor \rfloor$
1	lendiness t.L. same basis	1.32 1.40	-	
	A CONTRACTOR AND A CONT	n. 9700.	4.04	
	int. akd. Int. a		1. <b>0</b> 4	
	vi rickies.	b. 3.26		
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			Naph
	bbls., same basis b. 4.70 4.4. Methylene dienilino (p.p-di-	5.20	sha Boh
	aminodiphonyl methane) crude, dms. Ll., f.o.b b. 1.75	_	2-Ner 1-Ner
	purif., flake, same basis ib. 2.25 Methylene di-p-phenylene di-isocyanate (see diphenylene di-	- Imethana	1-Naj Naph
	4.4di-Isocyanate).  Methylene chloride, tanks, 4,000 gal	III SECULIARI NO	e-Net
	min., consumers, divd b	-	1-Nex
	Meury prieny pryszołone (see 1- Phenyl-3-methyl-pa	razolone-	2-Na 2-Na
	5). a-Methylstyrene, f.o.b. shipping pt., ib	_	Neat
	p-Mothythaphthalene, bulk, works.gal. 1.38 Methylthionine chloride (see Methylene blue).	-	30
	Mica, dry-grd., joint cement, plastic, 50 Bb., bgs . c.l., worksib		40
	dry-grd., rooling, 20 to 80 mesh,	-	De
12	worksb07 paint or lacq., wet-grd., 325-mesh,	-	"
	bgs.,c.l., l.o.b. works lb	Ξ	Neo
	wallpaper, bgs., c.l., f.o.b. works. lb	-	۱.,
	ing grades, FDA, tenks,	.481/2	Neo
	worksb38½ laminaling grades, FDA, tanks, works	.48	Nerc
	Mineral oil, white, 50-65 vis., USP light tanks, refygsl. 2.18	_	Nero
	65-76 vis., tanks, refy gal. 2.22	=	Nero Nero
	145-155 vis., tanks, refy gal. 2.33	Ξ.	Niac
	USP 180-190 vis., tanks, refygal. 2.34 200-210 vis., tanks, refygal. 2.36	-	
	340-350 vis., tanks, refygat, 2.45 Mineral spirits, petroleum, odoriess,	-	l fe
	tanks, New Jersey gal. 1.83 Houston, Tex	1.88 1.79	Nici
	Mineral spirits, petroleum, regular, tanks, New Jarsey gal. 1.41	1.49	Nick
	Houston, Tex	1.43 1.95	Nick
	Molybdenum metal, com,l., powd.,	_	Nic
	Molybdenum trioxide, CP, dms.,	_	Nici
	works, 24,000 lbs. or more.lb. 5.25 tech., chemical, dms., 24,000 lbs. or	-	Mic
	more, basis,	2.85 2.85	Nic
	Molybdic acid (See Ammontum Dimolybdata)   Monoammonium phosphate, fert.		Nic
•	grade, min. 13% N. 52% P. bulk, c.i., f.o.b. Fia.		Nic
)	works	-	Nitr
	bgs., c.l., t.l., works, frt.	_	9
	food grade, bgs., c.l., t.l., same ba-	_	o-N
	Mono-tert-butyl-m-cresol, bulk, t.l., (b. 1.69	-	n
	Monobutylamine, bulk, divd fb	1.00 d, mono).	0-N
	Monochlorobenzene, tanks, f.o.b. lb. 421/2 Monochlariolamine, tanks, frt, alld.	-	D-IV
	Elb43  Monoethylamine, 70% aqueous tanks,	.46	0-1
	frt. prepaid, 100% basistb94 anhyd., tanks, same basislb92	Ξ	NIN 1-0
	Monoisopropanolamine, dms., c.l., frt. alid. E	-	1
	tanka, same basis	-	2-1
	Monoisopropylamine, enhyd., dms., c.l., iri: prepaid ib	-	NII NII
	Monomethylamine anhyd., tanks,con-		I NA
5	tained basis frt. equald fb	_	(
	40-60% som, tanks, frt, equald.	-	
			NI
	100% basis	-	l
	Monopotassium glutamata, dms., 990	- -	N
	Monopotassium glutamate, dms., 990 (b. or more, frt. alid b	- .80	l
	Monopotassium glutamate, dms., 990 (b. or more, frt. alfd b. 2.50 Monosodium glutamate, 60-lb. 5gs. C.l., t.l., dlvd	- .80	N
	Monopotassium glutamate, dms., 990 ib. or more, frt. ald b. 2.50 Monosodium glutamate, 50-lb. bgs. c.l., t.l., dvd	_ _60 nonobasio).	N NB
	Monopotassium glutamate, dms., 990 (b. or more, frt. alfd b	_ _60 nonobasio).	N
	Monopotassium glutamate, dms., 980 fb. or more, frt. alid	_ _60 nonobasio).	Ni Ni
	Monopotassium glutamate, dms., 990 (b. or mors, frt. akd. b. 2.50 (Monosodium glutamate, 60-lb. bgs. c.l., t.l., dvd. b. 76 (100-lb. drums, o.l., t.l., dvd. b. 85 (Monosodium phosphate) (see Sodiumphosphate) (Montan wax, crude, Imp., German . b. 65 (dom., Calif., bgs., o.l., t.l., i.o.b. shipt. pt. 50 (dom., Calif., same basis. b. Morphine atkaloki, NF, 25 k lota . kilo 1018.00 (Morphine atkaloki, NF, 25 k lota . kilo 1018.00 (Morphine, dms., o.l., frt. alid. E . lb. 1.02	_ _60 nonobasio).	Ni Ni O-P-
6	Monopotassium glutamate, dms., 990 (b. or more, frt. alid b. 2.50 (Monosodium glutamate, 60-lb. bgs. c.l., t.l., dvd b 76 (100-lb. drums, o.l., t.l., dvd b 85 (Monosodium phosphate) (see Sodiumphosphate) (Montan wax, crude, Imp., German b 65 (dom., Calif., bgs., o.l., t.l., i.o.b. shipt. pt b 85 (arm., Calif., same basis lb. Morphine suitate, USP, 25 k lote klo 1018.00 (Morphine suitate, USP, 25 k lote klo 1018.00 (morphine, dms., c.l., frt. alid. E lb 94 (Muristio acid. (see hydrochloric acid.)	_ _60 nonobasio).	N NE
6	Monopotassium glutamate, dms., 980 fb. or more, frt. elid. b. 2.50 Monosodium glutamate, 50-lb. bgs. c.l., t.l., dlvd. b. 76 100-lb. drume, c.l., t.l., dlvd. b85 Monosodium phosphate (see Sodiumphosphate, Montan wax, crude, imp., German . lb. dom., Calif., bgs., c.l., t.l., t.o.b. shipt. bt. b. 65 rofd., dom., Calif., same basis. lb. Morphine alkeloid, NF, 25 k lote . klio 1018.00 Morphine autiate, USP, 25 k lote . klio 850.00 Morpholine, dms., c.l., frt. elid. E. lb. 1.02 tanke, frt. alid. E. lb. 94 Muriatio acid (see Hydrochloric acid). Musk. syn., ambrette, 25-lb. cns., lb. 8.25 Musk. syn., kotone, dms. b. 9.50	- .80  nonobesio). .57 - - - - -	N NE
6	Monopotassium glutamate, dms., 990 ib. or mors, frt. alid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.l., t.l., dvd. b. 78 100-lb. drums, c.l., t.l., dvd. b85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., Garman . lb55 dom., Calif., bgs., c.l., t.l., i.o.b. ahut, pt	- .80  nonobesio). .57 - - - - -	No-p-2-mo-p-
6	Monopotassium glutamate, dms., 990 fb. or more, frt. alid. b. 2.50 Monosodium glutamate, 50-lb. bgs. C.I., Li, divid. b. 76 100-lb. drume, c.i., Li., divid. 3b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., German . lb. dom., Calif., bgs., c.i., Li., Lo.b. shipt, pt. 8b. 61 rold., dom. Calif., same basis. lb. Morphine alkelold, NF, 25 k lots. kilo 1018.00 Morphine alkelold, NF, 25 k lots. kilo 850.00 Morpholne, dms., c.i., frt. alid. E. lb. 1.02 tanks, frt. alid., Ebb. Mustatio acid (see hydrochloric acid). Musk. syn., skotone, dmsb5. Musk. syn., kotone, dmsb3.00 Mustard oli, syn. (see Aliyl isothlooyanate). Mustard seed, Brown No. 1b20 Cenedian No. 1 yellowb21	- .80  nonobesio). .57 - - - - -	NAME NAME NAME NAME NAME NAME NAME NAME
_	Monopotassium glutamate, dms., 980 fb. or more, frt. alid. b. 2.50 Monosodium glutamate, 60-lb. bgs. C.J., Li, divid. b. 76 100-lb. drume, c.l., Li., divid. 8b. 85 Monosodium phosphate (see Sodiumphosphate), Montan wax, crude, Imp., German . lb. dom., Calif., bgs., c.l., t.l., lo.b. shipt. pt. 8b. 61 rold., dom. Calif., same basis. lb. Morphine alkelold, NF, 25 k lots. kilo 1018.00 Morphine alkelold, NF, 25 k lots. kilo 850.00 Morphine alkelold, NF, 25 k lots. kilo 860.00 Morphine alkelold, NF, 25 k lots. kilo 1018.00 Morphine alkelold, NF, 25 k lots. kilo 860.00 Morpholine, dms., cl., frt. alid. E. lb. 1.02 tanks, frt. alid., E	- .80  nonobesio). .57 - - - - -	N NE NE O-P-P-NN Ni
_	Monopotassium glutamate, dms., 980 fb. or more, frt. alid. b. 2.50 Monosodium glutamate, 60-lb. bgs. C.J., Li, dvd. b. 76 100-lb. drums, c.l., Ll., dlvd. b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., German . lb. dom., Calif., bgs., c.l., t.l., lo.b. shipt, pl. 61 rold., dom. Calif., same basis. lb. Morphine alkelold, NF, 25 k lots. kilo 1018.00 Morphine alkelold, NF, 25 k lots. kilo 850.00 Morphine auffate, USP, 25 k lots. kilo 850.00 Morphine auffate, USP, 25 k lots. kilo 1018.00 Morphine auffate, USP, 25 k lots. kilo 1018.00 Morphine auffate, USP, 25 k lots. kilo 94 Muristio acid (see Hydrochloric acid). Musk. syn., ambrette, 25-lb. cns., lb. 6.25 Musk. syn., ketone, dms. lb. 3.00 Mustard oil, syn. (see Allyl isothlooyanate). Mustard seed, Brown No. 1 b. 21 Canadian No. 1 byle. 20 Myrcia oil (see Bey oil).	- .80  nonobesio). .57 - - - - -	N N N N N N
_	Monopotassium glutamate, dms., 980 fb. or more, frt. alid. b. 2.50 Monosodium glutamate, 60-lb. bgs. C.J., Li, divid. b. 76 100-lb. drume, c.l., Li., divid. 8b. 85 Monosodium phosphate (see Sodiumphosphate), Montan wax, crude, Imp., German . lb. dom., Calif., bgs., c.l., t.l., lo.b. shipt. pt. 8b. 61 rold., dom. Calif., same basis. lb. Morphine alkelold, NF, 25 k lots. kilo 1018.00 Morphine alkelold, NF, 25 k lots. kilo 850.00 Morphine alkelold, NF, 25 k lots. kilo 860.00 Morphine alkelold, NF, 25 k lots. kilo 1018.00 Morphine alkelold, NF, 25 k lots. kilo 860.00 Morpholine, dms., cl., frt. alid. E. lb. 1.02 tanks, frt. alid., E	- .80  nonobesio). .57 - - - - -	N NE NE O-P-P-NN Ni
10	Monopotassium glutamate, dms., 980 fb. or mors, frt. skd. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., Garman . lb. 65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt, pt. b. 61 nord., dom. Calif., same basis. lb. Morphine autate, USP, 25 k lots. kilo 1018.00 Morpholine, dms., c.i., frt. sld. E. lb. tanks, frt. sld., E. lb. Muristio acid (see hydrochloric acid). Mustard seed, Brown No. 1 b. 3.00 Mustard seed, Brown No. 1 bb. Canadian No. 1 Yellow. lb. Criental No. 1 bgs. lb. Myrds of (see By cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Sume cil). Myrdsio acid, comi., pure, t.t., bgs. lb. Lanks. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb.	- .80  nonobesio). .57 - - - - -	N N N N N N
10	Monopotassium glutamate, dms., 980 fb. or mors, frt. skd. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., Garman . lb. 65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt, pt. b. 61 nord., dom. Calif., same basis. lb. Morphine autate, USP, 25 k lots. kilo 1018.00 Morpholine, dms., c.i., frt. sld. E. lb. tanks, frt. sld., E. lb. Muristio acid (see hydrochloric acid). Mustard seed, Brown No. 1 b. 3.00 Mustard seed, Brown No. 1 bb. Canadian No. 1 Yellow. lb. Criental No. 1 bgs. lb. Myrds of (see By cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Sume cil). Myrdsio acid, comi., pure, t.t., bgs. lb. Lanks. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb.	- .80  nonobesio). .57 - - - - -	N N N N N N
10	Monopotassium glutamate, dms., 980 fb. or mors, frt. skd. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., Garman . lb. 65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt, pt. b. 61 nord., dom. Calif., same basis. lb. Morphine autate, USP, 25 k lots. kilo 1018.00 Morpholine, dms., c.i., frt. sld. E. lb. tanks, frt. sld., E. lb. Muristio acid (see hydrochloric acid). Mustard seed, Brown No. 1 b. 3.00 Mustard seed, Brown No. 1 bb. Canadian No. 1 Yellow. lb. Criental No. 1 bgs. lb. Myrds of (see By cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Sume cil). Myrdsio acid, comi., pure, t.t., bgs. lb. Lanks. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb.	- .80  nonobesio). .57 - - - - -	N N N N N N
10	Monopotassium glutamate, dms., 980 fb. or mors, frt. skd. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., Garman . lb. 65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt, pt. b. 61 nord., dom. Calif., same basis. lb. Morphine autate, USP, 25 k lots. kilo 1018.00 Morpholine, dms., c.i., frt. sld. E. lb. tanks, frt. sld., E. lb. Muristio acid (see hydrochloric acid). Mustard seed, Brown No. 1 b. 3.00 Mustard seed, Brown No. 1 bb. Canadian No. 1 Yellow. lb. Criental No. 1 bgs. lb. Myrds of (see By cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Numeq cil). Myrdsio acid (see Sume cil). Myrdsio acid, comi., pure, t.t., bgs. lb. Lanks. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb. Myrdsio acid, comi., pure, t.t., bgs. lb.	- .80  nonobesio). .57 - - - - -	N N N N N N
10	Monopotassium glutamate, dms., 980 fb. or more, frt. alid. b. 2.50 Monosodium glutamate, 60-lb. bgs. C.J., Li, dvd. b. 78 100-lb. drums, c.l., Ll., dlvd. b. 85 Monosodium phosphate (see Sociumphosphate, Montan wax, crude, imp., German . lb. dom., Calif., bgs., c.l., Ll., lo.b. shot, pl. 61 rofd., dom. Calif., same basis. lb. Morphine sifested, NF, 25 k lots. kilo 1018.00 Morphine suifate, USP, 25 k lots. kilo 1018.00 Morphine suifate, USP, 25 k lots. kilo 1018.00 Morphine aufate, 80 nonobesio). .57 	N NB NB NB NB NB NB NB NB NB NB NB NB NB	
10	Monopotassium glutamate, dms., 980 fb. or mors, frt. skid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 78 100-lb. drums, c.i., t.i., dvd. b. 85 Monosodism phosphate (see Sodiumphosphate, Montan wax, crude, imp., Garman . lb. 55 dom., Calif., bgs., c.i., t.i., i.o.b. shidt, pt. Bb. rofd., dom. Calif., same basis. lb. Morphine akkeloki, NF, 25 k kota kilo 1018.00 Morphine	80 nonobesio). .57 	NA NA NA NA NA NA NA NA NA NA NA NA NA N
10	Monopotassium glutamate, dms., 990 tb. or mors, frt. skid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.l., t.l., dvd. b. 76 100-lb. drums, o.l., t.l., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate, Montan wax, crude, Imp., German . b. 65 dom., Calif., bgs., o.l., t.l., i.o.b. shipt. pt. b. 5b rofd., dom., Calif., same basis. b. 65 Morphine suitate, USP, 25 k lote. kkid. 1018.00 Morpholine, dms., c.l., frt. skid. b. 1.02 tanks, frt. skid., E. b. 94 Muristio acid (see hydrochloric acid). Musk. syn., kotone, dms. b. 9.50 Musk. syn., kotone, dms. b. 3.00 Mustard seed, Brown No. 1 b. 20 Canadian No. 1 Yellow. b. 21 Canadian No. 1 Yellow. b. 21 Myrds oil (see Bay oil). Myristio acid (see Bay oil). Myristio acid (see Numeg dil). Myrristio acid (see Numeg dil).	80 nonobesio). .57 	NA NA NA NA NA NA NA NA NA NA NA NA NA N
10	Monopotassium glutamate, dms., 990 fb. or mors, frt. alid. b. 2.50 Monosodium glutamate, 50-lb. bgs. C.J., Li, dvd. b. 78 100-lb. drums, c.l., Ll., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., German . lb. 55 dom., Calif., bgs., c.l., t.l., lo.b. shipt. pl. b. 81 rofd., dom. Calif., same basis. lb. Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Morphine suitate, USP, 25 k lots. kilo 1018.00 Musik, syn., kotono, dms. b. 3.00 Musik, syn., kotono, dms. b. 9.50 Musik, syn., kotono, dms. b. 9.50 Musik, syn., kotono, dms. b. 9.50 Musik, syn., kotono, dms. b. 9.50 Musik, syn., kotono, dms. b. 9.50 Musik syn., potonokalite, dms. p. 9.50 Musik syn., potonokalite, dms. p. 9.50 Musik syn., potonokal	.80 nonobasio). .57 - - - - 7.00 - - - - -	N N N N N N N N N N N N N N N N N N N
10	Monopotassium glutamate, dms., 990 fb. or mors, frt. skid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b. 78 100-lb. drums, c.i., t.i., dvd. b. 35 Monosodium phosphate (see Sodiumphosphate, index, crude, imp., Garman . b. 65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt, pt. 61 dom., Calif., same basis. b. 61 Morphine autiste, USP, 25 k kots. kilo 1018.00 Morphine autiste, USP, 25 k kots. kilo 1018.00 Morphine autiste, USP, 25 k kots. kilo 1018.00 Morpholine, dms., c.i., frt. elid. E. ib. 1.02 tanks, frt. alid., E. ib. Music spy., servers, colonium, b. 3.00 Mustard ocid (see hydroctivorte acid). Mustard seed, Brown No. 1 b. 3.00 Mustard seed, Brown No. 1 b. 3.00 Myrstalo acid, comi, ptr., b. ib. 0.21 Oriental No. 1 bgs. ib. 21 Oriental No. 1 bgs. ib. 1.30 Myrstio acid (see Bvd). Myrstio acid (see Rumeg oil). Myrstio acid (see Numeg oil).	.80 nonobasio)57 7.00 1.34	NA NA NA NA NA NA NA NA NA NA NA NA NA N
40	Monopotassium glutamate, dms., 980 tb. or mors, frt. skid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.l., t.l., dvd. b. 76 100-lb. drums, o.l., t.l., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate, Montan wax, crude, Imp., German . b. 65 dom., Calif., bgs., o.l., t.l., i.o.b. shipt, pt. b. 51 rofd., dom., Calif., same basis. b. 65 Morphine suitate, USP, 25 k lote. kkid. 610,00 Morphosine, dms., o.l., frt. slid. c. ib. 460 Morphosine, dms., o.l., frt. slid. c. ib. 94 Muristio acid (see Hydrochlorite acid). Musk. syn., shotone, dms. b. 3.00 Mustard seed, Brown No. 1 b. 3.00 Mustard oil, syn. (see Allyl isothlooyangte). Mustard seed, Brown No. 1 b. 20 Canadian No. 1 Yellow. b. 21 Criental No. 1 bgs. b. 20 Myrds oil (see Bay oil). Myristio acid (see Bay oil). Myristio acid (see Numeg dil). Myrristio acid (see Numeg dil).	.80 nonobasio)57	NA ROOP 2-mo- p. N. N. N. N. N. N. N. N. N. N. N. N. N.
40	Monopotassium glutamate, dms., 980 tb. or mors, frt. skid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.l., t.l., dvd. b. 76 100-lb. drums, o.l., t.l., dvd. b. 85 Monosodium phosphate (see Sodiumphosphate, Montan wax, crude, Imp., German . b. 65 dom., Calif., bgs., o.l., t.l., i.o.b. shipt, pt. b. 51 rofd., dom., Calif., same basis. b. 65 Morphine suitate, USP, 25 k lote. kkid. 610,00 Morphosine, dms., o.l., frt. slid. c. ib. 460 Morphosine, dms., o.l., frt. slid. c. ib. 94 Muristio acid (see Hydrochlorite acid). Musk. syn., shotone, dms. b. 3.00 Mustard seed, Brown No. 1 b. 3.00 Mustard oil, syn. (see Allyl isothlooyangte). Mustard seed, Brown No. 1 b. 20 Canadian No. 1 Yellow. b. 21 Criental No. 1 bgs. b. 20 Myrds oil (see Bay oil). Myristio acid (see Bay oil). Myristio acid (see Numeg dil). Myrristio acid (see Numeg dil).	.80 nonobasio)57 	NA ROOP 2-mo- p. N. N. N. N. N. N. N. N. N. N. N. N. N.
40	Monopotassium glutamate, dms., 980 fb. or mors, frt. skid. b. 2.50 Monosodium glutamate, 60-lb. bgs. c.i., t.i., dvd. b. 78 100-lb. drums, c.i., t.i., dvd. b. 78 100-lb. drums, c.i., t.i., dvd. b. 35 Monosodium phosphate (see Sodiumphosphate, inc., 68 Monosodium phosphate (see Sodiumphosphate, b. 55 Montan wax, crude, imp., 68-man. lb. 65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt, pt. 55 hotolome, drie, 25 k kota kilo 1018.00 Morphine autiate, USP, 25 k kota kilo 1018.00 Morphine autiate, USP, 25 k kota kilo 1018.00 Morphine autiate, USP, 25 k kota kilo 1018.00 Morphine autiate, USP, 25 k kota kilo 1018.00 Morphine autiate, USP, 25 k kota kilo 1018.00 Morphine autiate, USP, 25 k kota kilo 1018.00 Morphine, dries, d.i., frt. elid. E. lb. 1.02 tanks, frt. alid., E. lb. 1.02 Morphine, dese dilydrochloric acid). Mustard ocid (see Hydrochloric acid). Mustard seed, Brown No. 1 lb. 3.00 Mustard seed, Brown No. 1 lb. 21 Criental No. 1 bgs. lb. 21 Criental No. 1 bgs. lb. 21 Criental No. 1 bgs. lb. 21 Myrds of (see Bey ol). Myrdsilo acid, comi., pure, t.t., bgs. lb. 1.30 lanks. lb. 1.12 Myristios off (see Numeg oli). Myrrh gurn, bgs. lb. 1.26 Houston, Tex. gel. 1.20 Naphthalene, vMAP, petroleum, tanke, New Jersey and New York- new Jersey and New York- gel. 1.29 Naphthalene, crude, domi., 78°, tanke, works. lb. 22 Naphthalene, phthalio anhydride grade, tanks, works. lb. 23 Naphthalene, petroleum, 80° O. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	.80 nonobealo)57 7.00 1.34 1.34	NA ROOP 2-mo- p. N. N. N. N. N. N. N. N. N. N. N. N. N.
40	Monopotessium glutemate, dms., 990 tb. or mors, frt. skid. b. 2.50 Monosodium glutemate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b85 Monosodium phosphate (see Sodiumphosphate), Montan wax, crude, Imp., German .b65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt. pt80 rofd., dom. Calif., same basis. lb. Morphine suitate, USP, 25 k lote . k80 Morpholine, dms., c.i., frt. elid. Elb. 1.02 tanks, frt. skid., Elb. db. 1.02 Muristio acid (see Hydrochloric acid). Musk. syn., ambrette, 25-lb. cns., lb. 6.25 Musk. syn., ketone, dms. lb. 3.00 Mustard seed, Brown No. 1 lb. 3.00 Mustard oll, syn. see Allyl solnhoryansts. Mustard seed, Brown No. 1 lb20 Canadian No. 1 Yellow. lb20 Myrda oll (see Bey oll). Myristic acid, comi., pure, t.i., bgs. lb1.20 Myrda oll (see Bey oll). Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.20 Naphths, petroleum, cleaners (see Cleaner's rep Naphths, vM&P, petroleum, tanks. New Jeraey and New York.	.80 nonobasio)57 	NA NO-P 2-mo- p. N. N. N. N. M. N. N. N. N. N. N. N. N. N. N. N. N. N.
40	Monopotessium glutemate, dms., 990 tb. or mors, frt. skid. b. 2.50 Monosodium glutemate, 60-lb. bgs. c.i., t.i., dvd. b. 76 100-lb. drums, c.i., t.i., dvd. b85 Monosodium phosphate (see Sodiumphosphate), Montan wax, crude, Imp., German .b65 dom., Calif., bgs., c.i., t.i., i.o.b. shipt. pt80 rofd., dom. Calif., same basis. lb. Morphine suitate, USP, 25 k lote . k80 Morpholine, dms., c.i., frt. elid. Elb. 1.02 tanks, frt. skid., Elb. db. 1.02 Muristio acid (see Hydrochloric acid). Musk. syn., ambrette, 25-lb. cns., lb. 6.25 Musk. syn., ketone, dms. lb. 3.00 Mustard seed, Brown No. 1 lb. 3.00 Mustard oll, syn. see Allyl solnhoryansts. Mustard seed, Brown No. 1 lb20 Canadian No. 1 Yellow. lb20 Myrda oll (see Bey oll). Myristic acid, comi., pure, t.i., bgs. lb1.20 Myrda oll (see Bey oll). Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.12 Myristic acid, comi., pure, t.i., bgs. lb1.20 Naphths, petroleum, cleaners (see Cleaner's rep Naphths, vM&P, petroleum, tanks. New Jeraey and New York.	.80 nonobasio)57 	N N N N N N N N N N N N N N N N N N N
_	Monopotassium glutamate, dms., 980 fb. or mors, frt. sid. b. 2.50 Monosodium glutamate, 60-lb. bgs. C.I., Li., dvd. b. 78 100-lb. drums, c.I., Li., dvd. b. 78 100-lb. drums, c.I., Li., dvd. b. 78 Monosodium phosphate (see Sodiumphosphate). Montan wax, crude, imp., Garman . lb. 55 dom., Calif., bgs., c.I., t.I., lo.b. shipt, pt. 58 rofd., dom., Calif., same basis. lb. Morphine avitate, USP, 25 k kots. kilo 1018.00 Morphine avitate, USP, 25 k kots. kilo 1018.00 Morpholine, dms., c.I., frt. sid. E. lb. 1.02 tanks, frt. sid., E. lb. 1.02 Muristio ecid (see hydroctivorts acid). Musk. syn., ambrette, 25-lb. cns. lb. 6.25 Musk. syn., kotone, dms. lb. 9.50 Musk. syn., kotone, dms. lb. 9.50 Musk. syn., kotone, dms. lb. 9.50 Mustard oil, syn. (see Aliyl isothlooyanate). Mustard seed, Brown No. 1 lb. 20 Canadian No. 1 Yellow. lb. 21 Oriental No. 1 bgs. lb. 20 Myrds oil (see Bay oi). Myrtsilo acid, comi., pure, t.I., bgs. lb. 1.30 Ianks. lb. Myristica oil (see Numeg oil). Myristica oil (se	.80 nonobasio)57 	NA NO-P 2-mo- p. N. N. N. N. M. N. N. N. N. N. N. N. N. N. N. N. N. N.

Mothyl violet toner, tungstated, PTA,					
CCIS SAMA DARIA III	4.70	5.20	Naphthol arylide red toner deep		
4.4.·MCINYIONO GIBNIINO (D.D.di.	4.10	9.20	shades, bhis	3.40	15.45
aminodiphonyl methanet			Bight shades, bbls	9.20	13.00
crude, dms., t.l., f.o.b b.	1.75	- '	אינוויקפוריו ו-c-sullonic acid (aaa L., acid)		BIQ.
purif., flake, same basisib. Methylene di-p-phenylene di-isocyanate (s	2.25		a S each international Shall (National Carlos) in the C-long representation of the Carlos (National Carlos Car	icid).	
TITION TO THE TOTAL PROPERTY OF THE TOTAL PR	ree alpheny	imethane i	ा प्यक्रमध्याप्रमध्यात इस्रोटियोट mbad acid (see Cle	ve's acid)	
Methylene chloride, tanks, 4,000 gal.			l establications (SIKS top)		
Min., consumers, divd is	.35		worke	2.10	-
Methylpenianediol(see Hexviene aluculi			2-Naphthylamine-4,8 disulfonio acid (see C	mt a acid) secolo esi	
Melnyiphenyipryazolone (see 1- Phenyi-	3-methyl-py	razolone-	I & NHUMINDIANS, I stillant och lega Takis	15 800). 16 800).	ωį.
ວ).			resatsroot ou, 20°F, t.l., 1.o.b. works		
a-Methylstyrene, f.o.b. shipping pt., (b.	.44	-	1 ams	.52	-
p-Mothylnaphthalene, bulk, works gal. Methylthionine chloride (see Methylene bl	1.38	-	tanks, f.o.b. worksb.	.47	-
MICA, Gry-Qro., Joint Cement, plastic, 50	uoj.		30°F, t.l., f.o.b. works	.52 .44	-
®., bgs , c.l., worksib.	.071/2	_	40°F, dms., t.l., f.o.b. works b.	.4B	.49
dry-grd., roaling, 20 to 80 mesh.			tanks, t.o.b. worksib.	.39	_
works b.	.07	-	<ul> <li>Delivered prices apply on shipments with</li> </ul>	n 300-mile	a radius o
paint or lacq., wel-grd., 325-mesh,	48		Philadelphia, Pa., other areas, 1 44	: higher; '	lexes, 2
bgs., c.l., l.o.b. works lb. rubber, bgs., c.l., l.o.b. works lb.	.16%	-	higher and West Coast 3c. higher. Neomycin sulfate, USP, non-sterile.		
wallpaper, bgs., c.l., f.o.b. works, lb.	.1644 .22	-	dms. 60-klo. lots, activity ba-		
Microcrystalline wax, petroleum, coat-	.22	-		76.00	_
ing grades, FDA, tanks,			Neopentyl glycol, slurry, 90% ., c.l., Ll.,		
works b.	.381/2	.461/2	Qvdb.	.522	-
iaminaling grades. FDA, tanks,			powder, flake, bgs. t.l., dvd ib.	.598	
works	.38%	.48	Nerol, tech., dms	5.30	5.75
Mineral oil, white, 50-65 vis., USP light	0.10		perf. grade, dms	4.60	5.00
tanks, refygal. 65-76 vis., tanks, refygal.	2.18 2.22	-	Nerokiol syn. 55-gal. dms ib.	7.05	Ξ
80-90 vis., tanks, refy	2.25	-	Nerolin, Bromelin,klio	7.22	_
145-155 vis., tanks, refygal.	2.33	_	· Niachamida, USP, t.L.dms kilo.	8.00	-
USP 180-190 vis., tanks, refygal.	2.34	-	Niscin NF, dms., 5,000 kilos or more.		
200-210 vis., tanks, refy gal.	2.36	-	divdkilo	7.50	-
340-350 vis., tanks, refy gat,	2.45	-	feed-grade, 98-99.5%, bgs., same basiskilo.	5.10	5.50
Mineral spirite, petroleum, odoriese,	1 00	4 60	Nickel ecetate, dms., 5,000-lbs. to t.l.,	U. 1U	5.00
tanks, New Jersey gal. Houston, Tex gal.	1.83 1.78	1.88 1.79	dlvd.Eb.	1.82	-
Mineral spirits, petroleum, regular,	1.70	1,70	Nickel carbonate, dms., bgs., 5,000-		
tanks, New Jersey gal.	1.41	1.49	lbs. to t.l., divd. Eb.	3.45	-
Houston, Tex gal.	1.41	1.43	Nickel chloride, bgs., 10,000-ibs. to t.l.,	4 40	
Molybdate orange, bblsb.	1.52	1.95	Mickel Supports in cone dmr. bl	1.19	-
Molybdenum metal, com,l., powd.,	40.00		Nickel fluoborate, Ilq. conc., dms., t.l., divd. Eb.	1.25	_
99.8%, dms., worksb.	13.50	-	Nickel metal, electro cathodes, cs.,		
Molybdenum trioxide, CP, dms., works, 24,000 lbs. or more.lb.	6.25	_	worksb.	3.45	-
tech., chemical, dms., 24,000 lbs. or	U.EU	_	Nickel nitrate, dma., bgs., t.i., dlvd.		
more, basis,	2.65	2.86	E	1.18	-
tech, metallurgical, dras. same basis.lb.	2.65	2.85	Nickel oxide, 75%-76% Ni, dms., 500-	2.80	_
Molybolic acid (See Ammonium Dimolybo	ieto)		lb. lots, f.o.b. works łb. Nickel sulfate, bgs., t.l., divd. E lb.	.80	.90
Monoammonium phosphale, fert.			Nicotinic acid (see Niacin).		
grade, min. 13% N. 52% P.			Micotinemide (see Niscinemide).		
bulk, c.l., f.o.b. Fia. workston	155.00	_	Nitric scid, 38° Be., 38°Be, 40°Be,		
Monoammonium phosphate, tech.,	100.00		42°Be. tanks, c.l., works NF,	195.00	
bgs., c.l., t.l., works, frt.				182.00	_
equald 100 lbs.	54.00	-	941/2% to 98% HNO <sub>3</sub> , tanks, works, 100% basis ton	280.00	-
food grade bos. c.l. t.l. same ba-			o-Nitroaniline, flake, dms., t.l.		
sis100108.	59.25	-	WORKSID.	1.51	-
Mono-tert-butyl-m-cresol, bulk, t.l (b.	1.69 . <del>9</del> 6	1.00	molten, reid., tanks, works lb.	1.44	-
Monobutylamine, bulk, divd fb. Monochloroacetic acid, purif. (see Chior			molten, tech., works	1.37	-
Monochlorobenzene, tanks, f.o.b lb.	.421/2	-	o-Nitroeniline, orange toner, bgs., frt. alid	1.90	_
Monoethanolamine, tanks, Irt. alid.			p-Nitroaniline, dms., c.l., t.l., 30,000 lb.		
E	.43	.46	minworks lb.	1.63	-
Monoethylamine, 70% aqueous tanks,	0.4		o-Nitroanisota, 100-kilo lots kilo	8.75	.34
frt. prepaid, 100% basis ib.	.94 .92	Ξ	Nitrobenzene, tanks, f.o.b	.33	.34
enhyd., tanks, same basis lb. Monoisopropanolamine, dms., c.l., irt.	.52	_	o-Nitrochiorobenzane, dms., t.l., c.l., f.o.b	.82	_
ald, E	.76	-	tanks, same basis	.74	-
tanka, same basisib.	.86	-	2-Nitro-p-cresol, tech., dms., t.l., frt.		
Monoisopropylamine, anhyd., dma.,			eldb.	1.75	-
c.i., irt. prepaid ID.	.79	-	Altroethane, tanks, divd. E	2.50	-
tanks, same basisib.	.76	-	Nitrogen solutions, direct application, over 32% N, and mgf. type.		
Monomethylamine, anhyd., tanks, con-	.5472	_	worksunit-ton.	1.20	-
tained basis frt. equald fb. 25% soh., tanke, frt. alid. 100%	.0472	_	direct application, 19-32%		
basisib.	.57	-	Munit-ton.	1.26	1.46
40-80% soin., tanks, irt, equalo.			Nitrogenous sewage sludge, proc-		
100% basisib.	.631/2	-	esed, bulk, f.o.b. Chicagounitton.	4.10	_
Mononotaksium alutamata, dms., 990	0.50	_	NOTE: Price is per unit NH, plus \$1, per	runit B.D.6	ı. bulk, f.
fo. or more, frt. a@d	2.50	-	Profilear R World, Chickyo.		-
Monosodium giutamate, 60-lb. bgs. c.i., t.i., dvdb.	.76	.80	Nitrogenous tenkege, processed, bulk, per unit-ton NH <sub>s</sub> , f.o.b. Cerrol-		
100.lb. drume, c.l., t.l., dWd	.85	-	per unit-ton NH <sub>3</sub> , f.o.b. Carrol-	7.00	_
100-10, diginia, o.i., oin distriction		nonobasio).	lyffle, Wisc unit ton	4 76	_

WEEK ENDING DEC. 19, 1986

	Oleum (see Suffuric ecid, fuming).		
	Olibanum gum, tears, bgs lb.	2.10	-
_	Olive oil, edible, Spenish, dms gal.	6.00	-
of	Italian B-type ga).	5.35	-
2c.	Olivine, crude, works	12.00	-
	20 mash, works lon	15.00	-
	100 mesh, works ton	20.00	-
	Oplum. USP, gran. powd. 26-kilo		
	lots	125.00	-
	Orange oil, expressed, USP, Calif.,		
	dms., f.o.b. plant lb.	1.20	-
	expressed Valericia, dms lb.	.75	-
ı	Celif., dist., cns. f.o.b. plant lb.	1.25	
	Florkia, dms	.60	.65
	Brazilianklio	.90	_
	West Indian, bitter, NF X, cns.,		
	dmslb.	13.00	-
	Orange peel, bitter, Haitian bis lb.	.38	-
	Oregano, Greece, 30M	2.60	-
	Turkey	2.80	-
	Mexico	1.05	-
	Origanumoli, Spanish, cns kdo	35.00	_
'	Orris root, Florentine, bls lb.	4.00	-
	powd., bbis., bxsb.	4.60	6.00
	Verona blstb.	3.00	-
	powd., bbis., bxsib.	4.60	5.00
	Ouncury wax, reid., pure, bgs lb.	3.25	3.35
	Oxalic acid, bgs., c.l., works lb.	.44	_
	b-Oxynaphthoic acid dms. works,		
	tochlb.	2.55	-
	Oxyquingine base, pure, 1,000 lbs.,		
	fri.atidlb.	8.00	-
	Oxyguinoline sulfate, 100 lbs. frt.		
	alid	4.00	-

	١

	ľ		
ļ	Palladiummetal, works Troy-oz.	119.00	_
- 1	Pelmoli, (see Ods, Fata & Waxes Market F	Reporti	
- 1	Palm oil acid, dbt-dist. dms lb.	311/2	_
	tankslb.	.30	_
- 1	s.d., dms	.42	.45
	tankslb	.35	_
- 1	Palm kernel oil, bulk, cl.f., U.S.		
- 1	portskb.	.1812	.191
- 1	ports	42.00	46.00
- 1	Paimitic acid, 90%, tech., bags lb	.53	-
- 1	tanks	.51	-
- 1	Papaverine hydrochlorida, NF powd .	FG 50	
- 1	imp. bulk kilo	56.00	-
- 1	imp. bulk kilo Paprika, Hungarian, 100 AU bgs ib Spanish, 110 AU bgs ib. Paratfin, fully-refd . 127-130 F., ASTM,	80	-
- 1	Spanish, 110 AU bgs	.90	_
- 1	Parainn, luily-reid . 127-130P., Ad IM,	20	35
- 1	tanks, refy 130-135 F., ASTM, tanks, refy.	29 3372	39
- 1	130-135 F., ASIM, WIND, 1917.	.35	.41
- 1	140-145 F., ASTM, tanks, rety. 150-155 F., ASTM, tanks, rety. slack wax, 5% oil, tanks rety.	4115	46
- 1	alash was 69% oil tanks rafu	19	
- 1	12% oil, tanks raty	.19 .21	_
- 1	20% nii tanks refy	16	-
- 1	ALLD tomorrow was are an arbitrary 3F b	igher than a	ASTP.
- 1	Paraformatically de, 91%, flake, bgs. cl., tl., divd. b. 95%, powd., bgs., c.t., tl. divd. b. Paraidehyde, tech., 98%, 55-gal. dms.,	•	
ь.	c.l., t.l., <b>di</b> vd.,	2912	-
<u>"</u> !	95% powd., bgs., c.t., t.t divd. ib.	.391/2	-
- 1	Paraldehyde, tech., 98%, 55-gal. dms.,		
	Li. Lavis E	.7872	-
ı	tanka divil it	.58Vz 1.75	-
- 1	Parathion, ethyl, oms., irt. alid lb. Parathion methyl (see Methyl parathion).	1.75	-
	Parathion methyl (see Methyl parathion).	9.75	_
	Para toner red, bbis	3.75 3.75	_
	Chichated (180 4) kgs	18.50	20.00
1	Patchouloi, Indonesian, dmskilo	19.00	21,0
	Peach kernel oil LISP (see Aprico) kerne	f Oly	
	Patchouli oil, Chinese. kilo Peach kernel oil, USP (see Aprico I kerne Peanut meal (see Oils, Fats & Waxes m	wket recort	3.
	PAMIN'ILO ISSE UNS. PAUS O TRAVOS II PUR	et report).	•
	Pectin dom., NF, citrus, powd., 100-		
	kilo lots divo	3.30	3.7
	Pelargonic acid, nat., tanks, min. frt.		
	- MEC NO.	.70	-
		.70	-
	Penicilin, polassium, non-sterie, 200- bilion-unitiots, bilionunita Penicilin, procaine, sterie 50-bilion	25.00	30.0
<b>1/2</b>	DINON-UNIT OFFICE STATES	20.00	30.0
hy∙	Penican, processe, steme our conor-	36.00	_
	unit lots, bulk billion units.	10.25	_
	Pennyroyal of, dms	14122	
1	(.o.b. Wichta, Kan	.55	-
	Pentagothritol, tech., bos., c.L., (.o.b.,		
	Pentaerythritol, tech., bgs., c.i., f.o.b., irt. sid., b. Pentaerythritol, di- and tri-isomers (se	.71	
	Pentserythritol, di- and tri-isomera (se	e Dipantes	rythrito
	i Panisarvityiini iriscrylate, t.i. CMB.,		
	1.o.b. works	1.50	-
	Pantobarbital, dms., 100 lbs. or more.	7 00	
	Pantobarbital, dins., 100 ibs. or more, frt. alid	7.00	
	Pentobarbitat-scolum, oms., 100 ica.	14.00	٠ _
	or more, divid	14.00	_
	Pentyene terrezor, Nr., unis., 200 km	32.00	-
,	iolakio Papper, black, Brazillan, bgsb.	2.48	
	I chips I risked comment after a comment	2.10	

roleum). ntha).	Octive (see iron oxide, yellow, net.) Ocotea cymbarum oli dma kilo 6.25 Ocotea, Chinese 90%	5.20 -
1.34	1-Octadecents, syrt., tanks, 1.0.b	
_	n-Octobe, 97% min., janke, 1002 6.25	•
	Octyl alcohol, perfumer's grade, bots., b. 1.40 crs., b. 1.40 n-Octyl, n-decyl phthalate, tanks.	1.76
2 - ans	Onwigning dres of Lil. works. 2.60	37
35.74	Octylphenol, molter 1.50, 75	.76
77 43	Official or led of the	50
11.10 <b>(90</b> )	Olaic acid, disl. (Netitie), time b 48 (anks b 38 (anks b 48 (b 48 (b 48 (b 38 (b.	3 4
er de	Oleto Born and Approximation 19	

December 22, 1986

CHEMICAL MARKETING REPORTER

2.46 2.65 .78 .85 .78 .80 .58 2.97 2.00 15.00 11.00 8.75 7.06 6.90

9.00

Lactose, edible, reg. bgs., c.l., works. b. .22
Lactose, USP, reg. dons., c.l., t.l., int. oquald. b, .85
Lactose, USP, spray dried, bgs., t.l., frt. equald. b. .60
ORTER December 22, 1988

CH	<b>EMICA</b>	L
PR	ICES	

			9.30	14.
	_	Phthalocyanine green toner, restrated.	8.65	9.
		Phihalylsulfacatamide, dma., 500- kilo	6.61	_
		Picolines, refd, mixed, bulk kilo	2.81	-
·		dry basis to b. Chariotte.	e 00	_
1986		tech., paste, 25-lb. ctns., t.l., dry ba-		_
		sis, f.o.b. Chartotte, N.C Ib.	5.00 2.20	=
.281/2	-	Dilocamina hydrochlorida, USP.		9 AAA 6
.31	_	Pimento see Alispice		£,W.W.
2.56	-	Pimento leaf oil, dms	3.90	-
5.25	-	bulk, f.o.b, works 100 lbs 4	7.00	53.0
5.25 3.25	-	basis 100 ips   0		54.6
6.00	-	i a-Pinena partume grade kilo		3
.365	-	b-Pinene, perfumery grade. lanks kilo	2.30	-
.365	Ξ	Piperazine, anhyd., dms., t.i., frt. alid.		•
.300 .360	-		1.80	-
.285	_	b. lots, frt. elidiD.	2.25	2.
.365	-	gms., t.l., frt. alld 10.	2.00	-
.340	Ξ	Piperazine hexahydrate, 44%, cms., 1.100-b. lote frt. alid lb.	1.60	_
.335	Ξ	Piperazine phosphate, 42%, dms., t.l.,	1.80	_
.270	-	Piperidinediat. 98% min., dms., c.l., t.l		
4014	40		5.00	-
.49	-	Platinum, metal, works Troy oz. 46	36.00	-
		fri. alidi ib.	1.84	1,4
		Polyester resin, unsaturated, g.p., or- thophthelic, bulk, tankcars,		
2.20		frt. alid	.51 .56	
2.22 2.00	2.45	Polyethylene resin, high-density, blow		
19.50	_	1 <b>ali</b> d	.44	
		injection molding, g.p., hopper cars, frt. eld.	.43	
.25	.29	extrusion, g.p., hopper care, same		
.64	_	wire and cable, nat., hopper cars.		
.58	-		.64	
2.33	-	sts ib.	.65	
	-	liner, hopper cers, frt alid lb.	.35	
1.04	-	clarity film, hopper cars, frt.,	.35	
4.60	-	pallet shrink film, hopper cars,		
84.00	-	extrusion coating, hopper cars.		
3.45	_	g.p., hopper cars, same basis . lb.	.37	
2.07	_		.36	
	_	blown (firm resin	.40	
	-	Polyethylene resin, low-density injec-	.40	
4.00	-		.45	
176.00 3.35	185.00	line wire, CATV, power cablelb.	.70	1
2.10	2.20	voltage, natural color, same		
1.50	-		.80	
5.60	6.90	14% carbon black, same	A9	
		wire and cable lacketing, black fb.	.60	
		units min milkon units	.52	!
1.35	2.00	Polyoxyethylene sorbitan monos- tearate, drns., 20,000-lb. lots,		
1.85	<b>-</b> .	workslb.	.73	1
	28 AA	dms., 20,000-lb. lots,		
	20.00	Polypropylene resin, homopolymer,	.73	3
2.25	Ξ	g.p., nat., Ll., frt. alki b.	-45	5
2.36	-	same basis	.50	
. 1. <del>9</del> 5	2.05	high impact, same basis ib. Colored material 6c. per ib. higher for	.53	5
56	.87	each grade.		
		cars, frt. alid	.48	В
1 <b>23</b> .15	_	516b.	.61	1
	_	cars, same basis ib.	.57	2
. 29.00	-	expandable beads (EPS), pkging	_	_
A	-	modified, same basisb.	.7	
L 33.50	-	medium viscosity, bgs., t.l.,		
ı, T			1.0	0
n 3.10	_	ity, bgs., t.L, divdb.	1.0	5
1. 3.45	_	polymer dispersion, bgs., t.l.,		
	_	g.p. suspension, bulk, same ba-	.5	
91	-	818,		38 17
o40	_	film grade, bulk, same basis fb.		37
	_	persion, same basis ib.	.£	58
. 45.00	-	g.p. copolymer suspension, same		45
o82	-	Poppyseed, Dutch, bgs	.8	59
o38	-	Potash agricultural (see Potassium muri	). .(elsji	53
		Potash, caustic. Iq., 45% basis, Ianks,		00
o35		West Coast, 50% basis, tanks,		
i., b30		reg flake, 88-92%, 400-lb.dms., c.t.,	18.	
		works,	42.	35
b65	<b>.</b> –	) works Eb.		90
١		Potassium bicarbonate, tech., gran.,		
o. <b>9</b> .45		bgs., c.l., works lb.		.3115
5. 9.45 5. 9.30 5. 9.10	)	Potessium bicarbonate, USP, gran., dans., t.l	,	.72
	2.556 5.255	28½ - 31 - 2.55 - 5.25 - 5.25 - 3.25 - 5.26 - 3.25 - 5.26 - 3.25 - 3.300 - 3.360 - 3.3	1986	1986

				- <del></del>		-Z	-
							-
-	Phtherocyanine blue toner, water dis-			Potassium bichromate, gran., 400-b.	_48	_ Po	u
	persable, bbis., same be-	9.45 1	7.30	dms., c.l., t.l., works lb. Potassium bifluoride, tech., dms., t.l.,	.45	.49 Po	di
	Phthalocyanine green toner, all grades, bbis., frt. alld. E. of Rock-			works., int. equaldlb. Potasalum bitartrate, NF, gran., powd., bgslb.		Po	tı
	Phinalocyanine green toner, resinated.		4.00	Potassium borghydride, powd. ams.,		0.00 Pd	le
	6bls., same basis 10. Phihaivisulfacetamide, dms., 500- kilo		9.45	Potassium bromate, gran., powd., 200-lb. dms., c.i., f.o.b.		Po	rt
	lotskilo. Picolines, refd, mixed, bulk kilo	6.61 2.81	=	works	1.06	- Po	it
	Picric acid, pure paste, 25-lb, ctns., c.l., dry basis, f.o.b. Charlotte,	6.00	_	c.i. f.o.b. works	1.12	- Pr	
	N.C	5.00	_	tarks, t.w., works 100 ids.	14.60 20.65	- Pr	
•	sis, f.o.b. Chartotte, N.CIb. Pigment green B, kgsIb.	2.20	-	calcined, 99-100% K <sub>2</sub> CO <sub>2</sub> , hopper cars or trucks.		Pr	
	Pliocarpine hydrochloride, USP, dms	500.00 2,00	0.00	works 100 ios.	32.50 35.20	_   Pr	ď
	Pimento leaf oit, dime	13.90	-	drums	36.40	-	
	bulk, f.o.b. works 100 lbs dms., c.l., t.l., same	47.00 5	3.00	400-lb. dms., 5-dm. lots lb. Potassium chlorate, cryst., dms., c.l.,	.40	.46 Pr	C
	basis 100 lbs a-Pinens, perfume grads kilo	1.62	4.00	works	.14½ .30	- P	
	tech. grade	.18 2.30	.23	purif., gran., 326-ib. dms., f.o.b. shipping point lb.	.40	- Pr	
	tech. grade, tanks	.35	.40	Potassium chioride, chemical grade, 99.95% KCl, bulk, c.i., f.o.b		_   n-	f
	Piperazine citrate, 38%, dms., 1,100-	1.80	-	USP cryst. dmelb.	05.00 1.12	-   "·	
	b lots frt eldib. Piperazine dihydrochtoride, 53%,		2.35 j	USP gran., dmsb. USP powd., dmsb.	.67 .67	- 1	•
	dms., t.l., frt. alldlb. Piperazine hexahydrate, 44%, dms.,	2.00	-	Potassium chioride, agricultural (see Potas Potassium chromate, purif., cryst.,		<sup>(9).</sup>   P	
	1,100-ib. lots, frt. alid lb. Piperazine phosphate, 42%, dms., t.l.,	1.60	_	dms., works	.57	- n	
	irt. alid	1.80	_	dms., frt. alld	.931/2	- } P	
	works	6.92 5.00	-	lots or more, f.o.b. workslb. Potassium dichromate (see Potassium	1.32	-   <sub>P</sub>	'n
	Polycarbonate resin, pellets, nat., t.l.,	486.00 1 P.4	1.86	bichromate). Potessium fluoborate, tech., dms., c.i.,		p	'n
	fri. alid	1.84	1,00	t.i., works, frt. equald lb. Potassium fluoride, anhyd., dms.,	1.40	1.42 P	4
	thophthalic, bulk, tankcars, frt. alid	.51 .56	.53 .62	t.l.,	1.68	-   <sub>P</sub>	,
	Isophihalic, same basis lb. Polyethylene resin, high-density, blow	.50	.02	worksb. Price W. of Denver 4c. per lb. higher.	1.45	-   6	١
	molding, g.p., hopper cars, frt.	.44	.62	Potassium gualacolautionate, 300-lb. dma., 600 lbs. or more frt.		1	
	injection molding, g.p., hopper cars, frt. sid ib.	.43	.46	equaldb. Potassium hydroxide, tech. (see Potash,	2.10 caustic).	-	4
	extrusion, g.p., hopper cars, same basisb. wire and cable, nat., hopper cars.	.47	.48	Potassium hydroxide, USP, pellets, 100-fb. dms., c.l., t.l., works,		I	
	same basisb. wire and cable, black, same ba-	.54	.65	frt. equald lb. Potassium iodide, USP, gran., cryst.,	1.31	1.33	
	gisib. Polyethylene resin, low-density, film	.65	.75	dms., 1,000-lb. lots divd lb. ACS grade trucktoad lb.	10.72 11.32	12.39 13.55	P
	liner, hopper cers, frt alld lb. clarity film, hopper cars, frt.,	.35	.36	Potassium-magnesium sulfate. std., bgs., workston	59.00	_	P
	alidib. pallet shrink film, hopper cars,	.35	.37	basis 40% K <sub>2</sub> SO <sub>4</sub> and 55% MgSO <sub>4</sub> bulk, works ton	67.00	_	P
	same basis	.35	-	Potassium melabisulfate, gran., dms.	.44	_	P
	same basis	.38 .37	.42 .38	Potassium muriate, 60-62.4% min. K <sub>2</sub> O, s1d., bulk, c.l.,		l.	
	Polyethylene linear low-density g.p. resin	.36	.40	frt. equald., f.o.b. Sask., Canada	52.00	53.00	P _
	blown (firm resin	.40 .40	.43½ .45	soluble, fine std., f.o.b	53.50	54.50	P
	Polyethylene resin, low-density injec- tion molding, g.p., hopper			coarse, f.o.b. Saskton gran., f.o.b. Saskton	57.00 58.50	68.00	F
	cars, same basis lb. linewire, CATV, power cable lb.	.45 .70	.48 1.15	Potassium nitrate, fert, grade, std., 50- ton c.i., divd. SE, ton		274.00	•
	wire and cable thermoplastic high- voltage, natural color, same			prilled ton tech., gran., bgs., c.l., min. 50 tons,	277.00	284.00	1
	basis	.80	.90	divdton Potassium oxalate, neutral. tech., fine	470.00	-	١
	14% carbon black, same basis	.68	.73	gran., powd., 300-lb. dm., frt. equaldlb.	2.54	-	1
	wire and cable jacketing, black ib. Polymyxin sulfate, USP, bulk, 50-billion	.60	.61	Potassium pentaborate, gran., bgs., c.l., worksb.	1.01	_	
	Polyoxyethylene sorbitan monos-	.62	-	dms., same basis ib. Potassium pentaborate powder 15c. pe	1.06 r Ib. higher.	-	į
	tearate, drns., 20,000-lb. lots, works lb.	.73	-	Potassium perchlorate, dms. c.i., works	.78	-	
	Polyoxyethylene sorbiten triateerate, dms., 20,000-1b. lols,	70		Potassium permanganate, free flow- ing, bulk, hopper trucks,			(
	Polypropylene resin, homopolymer,	.73	-	works	1.09 1.20	-	
	g.p., nat., l.l., frt. alidtb. copolymer, med. impact, nat.,	.45 En	.48	150-kg. dms., same basisib. Potassium permanganate, USP, 50-ib.	1.17	-	
	same basis	.50 .53	.66 .60	kgs., works, c.l., t.l lb. Potessium persulfate, 225-lb, dms.,	1.38	-	1
	each grade. Polystyrene reain, cryst., nat., hopper			24,000 lbs. or more, f.o.b. plantcwt.	78.80	- 1	1
	cars, frt. alki	.48	-	ci/ti same basis	72.50	-	,
	sis	.51	-	bga., c.l., t.l., works, E., Irt. equeld 100 lba.	63.75	64.00	
	cars, same basis	.52	-	liquid, bulk 100 lbs. Potassium salicylate, USP, gran., 200-	46.00	49.50	
	grade, 1,000-lb. totab. modified, same basisb.	69 73	-	b. dms., 2,000 lbs. or more, works, frt. alld	1.52	-	
	Polyvinyi alcohol, fully hydrolyzed, medium viscosity, bgs., t.l.,	•		USP, powd., 300-lb. dms., 2,000 lbs. or more, same basis lb.	1.42	- 1	
	divdib, partially hydrolyzed, medium viscos	1.00	1.05	Potassium silicate, soin., 29.8-30.2 Be., 2.5 ratio, t.c., t.t.,			
	ity, bgs., t.l., divdb. Potyvinyi chloride resin., g.p., homo-	•	-	works 100 lbs. dms., c.l., t.l., works. 100 lbs.	18.90 25.90	-	
	polymer dispersion, bgs., tl., divdb	50	-	Potessium silicate, 40-40.5 Bs., 2.1 ra- tio, t.c., Lt., works 100 lbs.	25.05	_	ì
	g.p. suspension, bulk, same ba	. 38	-	40-40.5 Be., 2.1 ratio, dms., C.l., t.l., works 100 lbs.	32.05	-	
	pipe grade, bulk, same basis ib lilm grade, bulk, same basis ib Bohalaul abladde a n. canadama de	37	.47	Potassium allicate, electronica grade, 30-30.4 Be., 2.1-2.2 ratio, t.c.	1		
	Potyvityi chloride, g.p. copolymer da persion, same basisib	58	.61	Lt., works 100 lbs. dms. cl., t.l., works. 100 lbs.	33.10	=	
	g.p. copolymer suspension, same basis	45	.49	solid or glass, 2.15 ratio, dms., c.l., t.l., works 100 lbs.	53.30	-	
	Poppyssed, Dutch, bgs	)63	-	works	45.85		
	Potash agricultural (see Potassium m Potash, caustic. Iq., 45% basis, tarks works	3,		Decembers percentage by we - Decembers by welcomed by	-	divided by	
	West Coast, 50% basis, tanks ex terminal 100 ba	R.	-	Potassium sacofluoride, bgs., c.l., t.l.	1114	.15	l
	reg. Ilake, 88-92%, 400-lb. dms., c.t	l., • 45 96	-	Potassium-sodium tartrate, NF, gran or powd., dms	RA RA	1.20	ļ
	Potassium scetate, NF, gran., dms., t works E	.k b . on	- 1.31	Potassium sorbate, t.i. dms., divd ib Potassium stannate, dms., frt. aid &	N A	3.10 —	١
	Potassium bicarbonate, tech., granbgs, c.i., works	<b>1</b> .		Potassium suifate, spricultural grade min: 50% K <sub>2</sub> O std., bulk, c.i.			ł
	Botoselien Marcharde   195 am			f.o.b. works to	n 150.00	160.00	1

	·····	
		1
-	Potaesium tetraborate, gran., bgs., c.i.	_
Ì	works	Holi Son Son
l	225-lb. dms., 5-dm, lots lb. 4 na	900 900
ĺ	tech., cryst., dms., t.l ib	
	Potassium-tilanium fluorida, tech., dms.,t.l., works, frt. equaldib. 1.24 1.50	Rose Notes
ĺ	Potassium-zirconium fluoride, tech.,	
	equaldtb78 Prednisone USP. dms., 5 kilos or moregram 1.03	1
	Prednisolone acetate, USP, dms., 5 kilosor moregram 1.12	11
١	Prednisolone, anhyd., USP, dms., 5 kilos or moregram 1.12 Proceine hydrochloride, USP, antibi-	V
	olio grade, dms., 2,000-lb. lots, frt. alidlb. 4.95 5,75	500
	Proceine hydrochloride, USP, ampule grade, dms., 1,000-	100
	Ib. lots, frt. alid	10
	E	34. (1)
	n-Propyl alcohol, tanks, divd lb	520 0
	lots, divdlb. 11.50 -   n-Propyt-p-hydroxybenzoste, USP,   500 kiloskilo 10.80 -	i Si
	tech., 500 kilos, f.o.b kilo 10.36 Propyl paraben (see n-Propyl-p-hydroxybenzoate) Propyl thlouradi, dms., 50-kilo lots or	50 50
	I more	10
	n-Propylamine, dma., c.l., dwd ib75 .80 Propylane, polymer grade, f.o.b. Tex. and La. Gulf Coast points . lb17% -	<u> </u>
	chemical grade same basis ib1544 .16   Propylene glycol, indust., tanks .f.o.b. lb40 .42	{ is
	USP, tanks, f.o.b. E	1
	Propylene oxide, tanks, t.o.b. works, frt. egustd	¥
	Psyllium seed, USP powd bgs lb. 1.50 1.76 Pumice, dom., fine, 4F-0, bgs., ton	9
	lotston 270.00 - medium, 0½-1½, bgs., ton lots . ton 300.00 - coarse, 2-extra coarse, bgs., ton	١
	lotston 300.00 - Pumice, imp., Italian, lines, bgs., ton	12
	nedham, bgs., ton lots. f.o.b. East	1
	Coast	1
	Pyrazolone red (rad 38), dms works	9
	Pyrethrum flowers, fine grd. 0.9%  pyrethrins, ton lots, frt. ald.lb. 1.81	13
	Pyrethrum, purif., 20% pyrethrins, dms., worksb. 37 50 37.75 Pyridine, reid., 2-deg., c.l., works	,
	tanks kilo 5.70	
)	Pyridoxine hydrochloride, USP, 199 kilosor more divdkilo, 36.00	- 13
)	Pyrites, Canadian 48-50% S. mines	J,
	Pyrogatlol, 100-lb. dms., 1,000-lb., lots, divd 13.70 1525	
) )		
	Λ	:
		- !'
	Quassia chips	į
	Quinacridone maroon, dms., irt. 27.00 35.20	1
	violet rime for alid	:
	Quince seed, bgs b. 2.00 2.75 Quinidine sulfate, USP, 1,000-oz. dms., 2,000 oz. or more oz. 4.20 4.25	Ì
	Quinine hydrochloride, NF, 1,000-oz. dms., 2,000 oz. or more oz. 2.45 2.50 Quinine sulfate, USP XVIII. 1,000-oz. 2.30 2.50	1
	Outpoline das. t.l., (rt. equald	
	tanks, same basis	
		{
0		1
	R salt tech., 304 molecular wt lb. 2.12 Racemethionine, USP, 50-250 8.80	
	kilos	
	Represent oil dos	
	Rauwonia sarpentina root, porto, kilo. 22.00	
	Red camine, No. 40 (see Mercuric oxide, red).  Red precipitate. (see Mercuric oxide, red).  A0. 424	
	Resorcinos tecn., ogs., t.i., iii, kilo. 3.96	
	Resorand, Ustr., Cryst., utilis. 9.35 or more, works kilo. 9.90 or more hask , kilo.	
	Resorono monoacatate, ulitari ilib. 1.98	
ed b	Rhodamine red toner, moryedatub. 9.25	
15	tungstated, PTMA, Ullis. b. 11.50 to5.10 works. b. 105.00 to5.10	
20 10	Rhubarb root, India, whole, bgab	
•	Riboflavin, leed grade, 26 kilos, 34.60 divd. USP, 25 kilos, divd. 48.50 Filosflavin, USP, 25 kilos, divd. 48.50 Filosflavin 6 phosophiste-sodium, 25 48.00	4
00	Riboflavin, USP, 25 kilos, civo kilo. 48.00 Riboflavin 6-phosphata-sodium, 28-	

7				
James I	alned dms. t.l Ro. (see Castor oil scids, split)	1.25	-	Sodium bic
2 5/10(GEA)	Daleaching Roding Inc	rate). Yate).		og eq e,earso
Social barrier	NF Bulgarian, otto.	.700.00	-	fino, sam gran , sa
Turkish o	ilio, bolis	9.00	500.00 11.00	gran., fin Sodiumble
[Julge	40_45%, 100-lb, dm8.	15.00 .21	17.50 .23	Sodium bil frt
Works	unit-lb.			100-lb. b Sodium bisi
A				dms., c.l. Sodium bis
1				works, W
V_				Sodium bisu ba: soln , 100
	gran., soluble, dms. ib.lots, frt. alld	2 50	2.75	photogr Wo
izotarin NF.	powd., southe, oms., less natorib, lois, frt. alkd Ib.	3.75		Sodium bo
Out along	on-break, tanks, N Y Ib N.Y., divd	.50 .78 1 95	.80	powd., s Sodium be 10
(barian Di		1.65 1.25	1.30	Sodum bo so
Specil, Clary	r, Franch, Dols Kilo cns	165.00 14.50	180 00	30 Section br
L 52-Addahut	s kilo je tanks, f.o.b. lb NF, gran., powd., dms.,	19.00 3 60	21 00	dn Sedum ca c I
i 200	Ho. lots, one ship Ib I, tech., dms., c l., l.l.,	I 07	1.10	Sodium ca Sodium ca
WORK USP, CIVS	s	1.23	I 41 I 63	Sodium ca Sodium chi
1157. OOW	d., dms., 1,000 lbs. or lb.	1.33	-	do do
J. Calisco Phil	nytralicylate). led, common, 80-lb, bgs.,			Sodium ch c.t
61,1 bi5,880	L North, works80 lbs. mbasiston	4.02 60.00	61.20	Sodium ch Sodium ch
St. not. m	rade, same basis 80 lbs. adum, coarse, same ba- 	4.30 2 70	_	Sodium c We Sodium ch
bik same Sirife, do	m., bulk, works, 100%	18 00	25 00	( ). Sodium ch
	), basis, f.o.b. works E ton	65.00 90.00 185.00	98 00 99 00	Sodium cit
indone	od, E. Indian kilo sta kilo ech., tanks, works, frt.	102 00	-	Sodium cit
(qua 'ମନ୍ଦ୍ରିଷ' s	kilb salt. paste, dms., 100%	.50	•	Sodnin cy
nimetocyż j	s, works	2 59 36.00	46 50	Seelean cy 9:
) 97/00 BCIO.	CP, bgs., c.l., works lb.	1 95 1.94	-	di Sodam di
Secretary De	re, dms., 5,000-lb. lots. lb. owd., 99.99% Se., dms.,	3012	-	Sodiom di
(OT, 99:		13 00 10.00	15 00	Sodium di C
nati, Imakesy	No. 1, bis	75 70	80 71	Sodium er or
; jena.,;	bls. bxs	90 1.00	1 10 1 20	Prix es V
Aung Pagn	Mani, burnt, paper bos	.55	56	Sodum W Sodum flu
. 7a Man	works	.19\; .18\4	28/2 23 4	Sodium fli
W07	nn. cry-grd., bgs., c.l., ks 93%, 200 mesh ton Komesh	31.00	32.50	100 b USP
95%	325 mesh ton	32.00 34.50 37.00	33 50 35.50	f.e Sodium fo
La dy on	J. bon_ cl. works do ov.	51.50	54.50	Sodium gi
995.0	nder 15 microns, mi-	72.00 79.50	75 50 93 50	Sodium h
1 000	Money To INICIONS, MI-	104.00	82.50 105.00	Sodium hy Sodium h
140 me	5), bgs., c.l., works ton	37.00	-	f. Sodium h
i Bo	sh, bos., c.l., works ton chloride, tech., dms., c.l., ks fb.	34.75	-	R) Odernin h
34000	Lingois, ca., Troy. Oz.	.50 .36 6.30 <b>%</b>	=	Sodium hy Sodium hy
1 16	A NOT	4.29	-	110 lb. o Sodium hy
<sup>24</sup> 000ft (	rushed, bis	3.2088 1.00 1.35	1.85	Sodium loc ib Sodium li
hu, c	Lc1, works, (.o.b (on	120.00		Sodium i
\$72.56q	. 100-lb., paper bgs., c.i.	03.00	•	Sodium m
14 (2A	to la roy ser	150.00 123.00	-	Sodium ( g totrahy)
		175.00	195.00	Sodlum, i
164. 70 164. 71	400-to.dms, c.l., works ton.	205.00 500.00	225.00 570.00	fused, o
910.	se see	520.00	570.00	lanks, v Sodium r
vitte,	76%, 400-lb, done	520.00	-	0
	ter for solid, and \$15 ton high	27.50 ter. Prices li ton hisher f	28.50 n West 70c.	foodgr Sodium n
*4 8	Cone has .		er Atany auto	bulk, c.
idan (	100 lba	3.35	3.85	pentah
ion a	dns., c.l., works	.54 .57	-	bulk, c. Sodium n
iden de	m. 300 bs. or more.	.0/	- 6.75	cryst Sodium n
	our or more to p			Sodium 1
Marian C	toring bga cl. divd. E. ib.	4.73 1.49	1.50	Sodium n
ACT OF THE PARTY O			10.60	bu imp., co
	LILLING BOND, BORD,	17 (77)		bu (
	Committee Dealer	0317		(m Sodkm n
	ib.	.92 .92	1 -	1
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Sodium bicarbonate, USP, powd., reg.			Sodium orthogetes to the state			والوارق ومسارك المسارك والمسارك	
grado, bgs., c.l., t.l., works, frt. equald	17.05	_	Sodium orthosilicate, tech., anhyd., bgs., c.i., works 100bs.	34.50	_ i		
coarse, same basis 100 lbs. fino, same basis 100 lbs.	18.05 17.20	-	Sodium orthosilicate, tech., hydrated, flake, dns., cl., works. 100 lbs.	27.45	_	CHEMIC	ч.
gran , same basis 100 lbs. Cran , fino , same basis	17.85	-	Sodium oxelate, 98%, but 11 mode by	28.25 .46	-	icaemil	/_\
Socium dichromate, gran, hae et +t	17.60	-	Sodium pentachlorophenate, beads c.l., 30,000-b min ib.		-		
works, frt. equald ib. Sodium bifluoride, 400-ib. dms., c.l.,	.57	-		.67 .68	-	IDDIAEC	1
int. equald	70	-	Sodium perhodamital (see Pentobarbita	l-aodlum).	- 1	INKII IF 6	<b>\</b>
oms., c.l., works ton	175.00	-	Sodium persulfate, 225-lb, drue, 24 non	.321	.361⁄₂	PRICES	
2001UM DISUITICO, ANNVO, bas., cl. 11	13.00	-	bs. or more, i.o.b. plant ib. 55-lb. bgs. same basis ib.	.631/2	- i		
works, East 100 lbs. works, West 100 lbs.	28.50 32.00	-	SWIMI DOMINDONING (1886 Phanchach	.62 al-Sodium).	. <b>-</b> 1	WEEK ENDING DEC. 19:	1986
Sodium bisulfite, soln., 38%, bulk, 100% basis, works, East 100 lbs.	20.60	_	Sodium phosphate, anhyd., dibasic	76	-	Sorbitan monostearate, dms., c.l., t.l.,	
soln , 100%, buth, works, West 100 lbs. photographic grade, 43% soin.	20.00	-	tech., bgs., c.l., t.l., works, frt. equald 100 bs.	54.50		30,000 lb. min., f.o.b. worksb.	.76
WORKS 100 854	21.90	_	food grade, same basis, 100 lbs. Sodium phosphate, monobasic, tach.,	57.50	• :	Sorbitan tristearate, c.l., t.l., 30,000 ib. min., t.o.b. works ib.	.80
Sodium borate NF, gran., bgs., c.l., worksb.	.51	_	88Me basis 100 lbs.	55.75	-	Scribtol, USP. reg., 70% equenus	.00
powd., same basis	.52	-	food grade, same basis. 100 lbs. tribasic, fech., same basis. 100 lbs.	59,75 52,25	- 52.75	dms., c.l., f.o.b. shipping pointib.	.35
l 1000-addid ihs. works in	19.88	21.90	food grade, same basis. 100 lbs. chiorinated, same basis. 100 lbs.	63.25 31.50	- 1	tanks, i.o.b. shipping point . , ib. gran., dms., c.l. t.l., works ib.	30 .70
Sodium borohydride, stabilized water soln., 12% NaBH4, 100% basis,			cryst., tech., same besis. 100 lbs. cryst., food grade, same ba-	30.50	-	powd., dms. c.l., t.l., works b. Soybean meal (See Oils, Fats & Waxes n	.66 nerkot ren
3000 gal. tankwagon, works.ib. Sortum bromido, 99%, gran., 400-lb.	17.45	-	618 100 lbs.	35.50	-	Soybean oil (See Oils, Fats & Wexes man Soybean oil acidulated, soapstock,	rket repor
dms., I.o.b. worksb. Sectium carbonato, decahydrate, bgs,	1 04	-	USP, dried, powd., bgs., dms., works	.19	.2013	95% acid, tanka. New York ib.	.14
C l., l.l., works, ton	264 00	-	b. dms. dry hasts divid the	5.50	_	Soybaan oil, acid, dbl., dist., dms lb. tanks lb.	.48 .43
Sodium carbonale, cryst, monohydrate Sodium carbonale, monohydrated,	(see Soda	ı, ash)	Sodium propionate, dma., 2,000 bs. or more, f.o.b. frt. alid lb.		-	s.d., dms	.47 .38
Dujš., c.l., t.l., works ton Sodium corboxymethyl cellulose (see C	392.00	-	Sodium pyrophosphate, acid, tech., bos.,	.54	-	Spearmint leaves, imp., bis ib. Spearmint oil Chines c, 60% ib.	2.50 5.60
Sodium chlorate, crysial, bulk, t.c., t.t., dolivered, N.E	-		c.l., works, irt. equald 100 lbs. food grade, non-leavening, bgs., c.l.,	58.25	-	Chinese, 80% ib. Far West, native	8.00
delvered, S.Eton	335 00	-	works. frt. equald 100 lbs. Sodium pyrophosphate, ferric, dms.	B1.25	-	Far West, Scotchb.	9 50 18.50
Sodium chlorate, cryst., 450-lb. dms., c.i., works. Eb.	.27	_	c.l., t.l., works	.3860	-	Spruce oil, dms	6.00 .29
Sodium chloride, lech. (see Salt.) Sodium chloride, USP, gran., bgs ib.		_	anhyd., tech., bgs., c.l., t.l.,			Stannic chloride, anhyd., dms.,	N.A.
Sodium chlorite, tech., dms., c.l.,			works, frt. equald 100 lbs. bulk, hopper cars, same ba-	44.75	-	Stannic oxide, dms., works ib. Stannous chloride, anhyd , dms. wks . ib.	N.A N.A
workslb. Sodium chromate, annyd., dms., c.l.,		1.27	als 100 lbs. lood grade, bgs., c.l., t.l., same ba-	42.50	-	Stannous fluoborate, liq., conc., dms.,	
t I., works		-	5/5	53.00	-	t I., works, frt. equald ib. Stannous oxide, dms., works ib.	2.50 N A.
c I . t.l., works	.64	-	dms., 1,000-lb. lots or more,	• • •		Stannous suifate, dms., works ib. Stearic acid, double pressed, bulk . ib.	N A. .26
dms., c.f., t.l., N Y lb.	1.95	-	works, frt. equald lb. USP, powd., 200-lb. dms., 1,000-lb.	3.00	-	single-pressed, bulkib. triple-pressed, bulkib.	.28 .32
Socium citrate, USP, gran., dihydrate, 100 lb. bgs., tt., f.o.b. ship-			lots or more, same basisib. Sodium sesquicarbonate, bulk, c.l., t.l.,	3.05	-	Stramonium leaves, bgs lb	.15
ping pointib. Sedium cyanate, dms 1,000-ib. lots.		ż –	workston. bgs, c.l., 1.l. works 100lbs.	170.00 198.00	-	Streptomycin sullate, USP, bulkkilo. Strontium carbonate, glass grd , bgs ,	47.00
worksb. Seklein cynoldo, briquettes or gran.,	.85	-	Sodium silicate, solid, or glass, 3.22-	. 55.05	_	t.l., works	.37 \
99% min , 200-lb. dnis, min.,			3.25 ratio, bulk, c.l., t.l., works 100 lbs.	15.70	-	works	51.50
divd		-	bgs., c.l., t.l., works 100 lbs. 1.95-2.00 ratio, bulk, c.l., t.l.	27.75	-	t.t.,f.o.b workslb. Styrene-acrylonitrile resin, nat , bulk,	23
worksb Sodium diacetate, FCC, 50-lb. bgs	.68	-	works	20.30 22.15	- '	fob.plantlb	77
H., divd. E. of Rockles ib. Sodam diacotato, tech., 50-lb. dms	61	.67	soin., 37.6° solid, 3.22-3.25	22.13	_	cryst , bulk, samo basis Ib clear, same basis Ib	.77 77
c I , works	.52	-	ratio, bulk, c.i., t.i., frt. equald1001b.	6.30	. <del>.</del>	Styrol acotato, dms ib Succinic acid, puril., cryst , dms , i l.,	2 35
Sodium erythorbate, powd., gran., 11   or_mixed_11., Lo.b. shipping			"Ratio" indicates percentage by well percentage by weight of Na <sub>2</sub> O.		divided by	frt. atd	2 00
Prives W of Denver 2c. per pound h	. 2.60 Iglier.	2.85	Sodium silicoftuoride, bgs., c.l., t l., works, int. equald. 100 lbs.	17.95	19 75	work	1.71
Sodium ferrocyanide, bgs, t.l., worksb		_	Sodium stannate, dms. wks. int. atd. E.ib.	N A	-	Sucrose, rold , white, bgs , c1 , 1 o b. refy.E 100 bs	33 10
Sodium fluoboralo, tech., gran., dms.,		_	Sodium sulfanliate, dms, worksib. Sodium sulfate, NF XII, powd., dms.,	.22	-	Sucrose acelate, isobutyrate, 90% dms., i.i., divdb.	1.18
Sodium fluoride, white, 97%, 400 lb		_ <b>-</b>	2,000-lb. lotslb. tech., detergent, rayon-grade, c.l.,	.231/2	-	tanks, divd	1.10
drns., c.l., works, irt. equald lb 100 bgs., c.l., same basis lb	634	15 - -	works. Gulf ton	90.00	96.00	Sucrose octa-acetate, denaturing	1.10
USP powd., 200-lb. dms., t.l. f.o.b. shipping point lb		_	Sodium sulfate, West, bulk, c.l., works, frt. equald ton	90.00	101.00	grade, 100-lb. dms , f.o.b. workskio	12.50
I Sodium formate, bgs. c.l. works lb	20	-	bulk, cl.i, East, same basis ton Sodium sulfate, photo grade, 100-lb.	113.00	114.00	Sulfabenzamide, dms., 500 kiloskilo. Sulfabenzamide-sodium, dms., 500	39 50
Sodium gluconate, tech., 50-lb. bgs. 2,500 lbs. or more frt. ald lb	.60	-	bga., cl., works ton Sodium suifhydrate, flake, 70-72%,	47.00	53.00	kilos	25 00
Sodium hydride, oli dispersion, 60% NaH, 167-lb. dms., 10 dms.			dms., c.l., works, frt. equaldton	500.00	_	klios	20.00
works	1.86	-	lig., 44-46%, tanks, works, frt.			Sulfadiazine, USP, powd. dms., 500 kilos	53.00
Sodium hydrosulite, dmso.l., t.l.		_	equaldton Sodium suifide, flake, dms., c.i., works,	500.00	-	Sulfadiazine-sodium, USP, dms., 500 kilos	40.70
f.o.b. shipping point E ib Sodium hydroxida, USP, pellets, 100	64	-	E., frt. equald ton bgs., same basis ton	470.00 410.00	-	Sulfamerazine, USP, microcrystals, dms., 500 kBoskilo.	33.50
lb. dms., c.l., t.l., works, fri equaldb		1.06	Sodjum svifide, fused, dms., c.i.,	240.00	_	USP, powd., drns., 500 kilos kilo.	32.00
Sodium hydroxide, tech, (see Sodii, Ci	Kublic.)		works, E., Irt. equald ton Sodium suffite, anhyd., tech. 95-100%		_	Sulfamethazine-sodium, USP, powd dms., 50 klos klo.	13.00
Sodium hypophosphite, EN grade, 300 to, drns f.o.b. works ib	. 1.4ZI	5 1.50	bgs, f.o.b. works 100 lbs. Sodium suifocyanide CP (see Sodium t	23.76 Nocyanate)		Sulfamethazine, powder, dms., 500 kilos	9.00
110 lb. dms	ulate).	1.52	Sodium tetraborate (see Borax). Sodium tetrasulfida. fiq. 34%, dma.,			Sulfamic acid, cryst., bgs., c.l., t.l., works 100 bs.	38.00
Sodium lodide, USP, cryst., 300- to 500 lb, lote, dms. frt. equaldb		-	c.L. works., frt. equald ton	<b>540.00</b>		Sullame add, gran., dms., c.l., t.l., works	.36
Sodium lauryi sulfate, 30%, tanks		.32	Sodium thiocyanate, purif., cryst., 250- ib. dms., 5 dms. or more	9.78		Sulfanilamide, NF, reg. 1,000-lb. dms.,	2.00
f.o.b. works			f.o.b. worksb. tech., anhyd. dms., 2,000 lbs. or	3.26	-	frt. equald lb. Sulfaniic acid, tech., bgs., t.l., f.o.b.	
works	MII(B).		more worksb. Sodium thiosulfate, tech., photo- grade,	.97	-	Sulfaquinoxalina, veterinary, grade,	.671
Sodium metaborate, octahydrate gran, bgs., c.l., worksib		-	anhyd., 100-lb. bgs., c.l., t.l., works, int. squald 100 lbs.	45.60	-	Sulfur, crude, bright, molten, dom., f.o.b.	00.8
i intrahvdrátě, dráh, dgs, d.L.		_	I count containudrate, C.I., LL, SAITIS	28.50	_	vessels, Gulfports long-ton (.o.b. i.a. rely long-ton	118.00 120.00
works			basis. 100 bs. Sodium titangte, dms., c.l., works. , b.	.14%		recovered, divd., Houston. long-ton	120,00 135.00
fused cime, 24,000-b, lots or more	, .eu	_	Sodium irichioroscetate, 95%, 50%, 50%, 50%, 50%, 50%, 50%, 50%, 5	.28	-	ex terminal, Rollardam long ton f.o.b. tanks, Alberta, Canada, for US	
works	70	.80	Sodium tripolyphosphate, tech., bgs., cl., tl., works. irt. equald. , 100 lbs.	39.76	-	delivery long-ton dark_ex-Tampa, Fla long-ton	80.00 152.50
I Codium metaphotohala, 1901, DUS	•		Live horser com same basis, 100 lbs.	37.50	-	Tampa price subject to \$10 per id most customers.	ong-ton di
c.i., f.c.b. shipping pt. iri equald			(ood grade, bgs., c.r., c.r., saile ba-	48.60	-	Sulfur, crude, 99.5% min. purity, comi. flour, 60-lb. bgs., c1., mines	
food grade, bgs. cu. r.c.b. irr. equal.	68.25	-	Sodium lungstate, tech. nigh inter-	·		basis 100 lbs.	13.60 13.60
South Hetasicale, ally all 100 be	27,25	· <del>c</del>	Solin grade dms. 10,800 lbs. or	5.00	5.50	Sulfur, reid., 99.5% min. purity, rolls	19.00
1 half of works 100 los	,	· - · .	i more same basis	. 6,00	-	50-lb. bags, c.l., mines ba- als 100 lbs.	17.50
penjahydrate, bgs., d.t., 1.0.0. sin	18.95		Sodium-ammonium phosphate, purif., cryst., dms., works	.52	-	flour, light, 50-lb. bgs., same be-	20.00
Sodium motubriate anhyd., dms. f.o.t	j.		Sodium-formaldehyde autoxylate.	.91	-	Sulfur, reid., sublimed, NF, 99.85% min. punty, 50-sb. bgs., c.l.	
WORKS, 100 DS 810 OVER	4.12	•	Sodium-zirconyl sullate, oma., 1,000-	28	· <del>-</del>	mines basis 100 bs. Sulfur, rubbermakers, 99.6% min. pu-	26.00
CANDON MENTINGENIA DELLA COLO POR		·	lech. dms., any quantity, works. so.	16	',	rity, comi., reg., 50-lb. bgs., o.i., mines basis 100 lbs.	
1.0.b. works			I BLOSIBLIO, Dai, And the committee of			i fine 98% min, passino tyrouch 325.	
ondian ellerio dom industrial bos			26 L'urerb terine	1.52	: 🗓 🕠	mesh, same basis 100 los. Sutur dichloride, drns., c.i., works, frt.	10.00
O.L. WORKS.	,250.00	FORING	HOUSTON	1.64	b, gener	equald	24
Imp., comi., 100-lb. bgs., o.t., Att. o	205.00	214.00	I make a second of the control of th	CHAINMAN	u.i. 300 F*	Sulfur dicydde, liq., bulk, t.c., t.t., 1,0.b.;	
bulk, c.i., same basis	n 182.00	n Ka	New Jerley 98	1.80 1.80	_	Sulfur monochiolide, dms., c.L., works,	
imp., agriculturati bulk, c.i sama basis	n j 40.00		Houston gal	1.30 2.50	1.85 3.10	frt equald lb tanks, samé básis lb	16
The state of the s							
Sodium nitrite, USP, ome 5 com 100 to	37,25		I Solbiosoid of miles are		CHRM		
Sodium nitrile, USP, amer, 0-1 frt, equald	37,25		Attorn, commune, turks.  New Jertey gel. Houston gs. Brotis acid, i.i. dme, civid.  December 22, 198	102 340		ICAL MARKETING REPORT	

-	WEEK ENDING DEC. 19;	1986	
-	Sorbitan monoalearate, dms., c.l., t.l., 30,000 lb. min., f.o.b.		
-	Worksib. Sorbitan tristearate, c.l., t.l., 30,000 ib.	.76	-
-	min., f.o.b. works b. Sorbitol, USP, reg. 70% aqueous, dms., c.i., f.o.b. shipping	.80	-
2.75	pointib. tanks, i.o.b. shipping pointib.	.35 30	-
= 1	gran., dms., c.l., t.l., works	.70 .68	.74 .72
-	Soybean meal (See Oils, Fats & Waxes m Soybean oil (See Oils, Fats & Waxes mari Soybean oil acidulated, spanstock	erko: report.)	)
.2013	Soybean oil acidulated, soapstock, 95% acid, tanks, New York lb. Soybean oil, acid, dbl., dist., dms lb.	.14 .48	.15 .59
-	lanksib. s.d., dmsib.	.43 .47	.44 .58
-	tanks	.38 2.50 5.60	.43 2.70
_	Far West, native	8.00 9.50	Ξ
_	Far West, Scotch ib. Spruce oil, dms ib. St. John's bread, cdible, bis ib.	18.50 8.00 .29	- -30
	Stannic chloride, anhyd., dms.,	.28 N.A.	-
_	Stannic oxide, dms., works ib. Stannous chloride, anhyd , dms. wks . ib.	N.A N.A.	-
_	Stannous fluoborate, liq., conc., dmg., t.l., works, frt. equald ib.	2.50 N A.	-
	Stannous oxide, dms., works	N A. N A. .26	- .39
-	single-pressed, bulkib. triple-pressed, bulkib.	.28 .32	.375 .40
_	Stramonium leaves, bgs	.15 47.00	.20 -
-	Strontium carbonate, glass grd , bgs., t.l., worksb. Strontium nitrate, 50-15 bgs., c.l.,	.374	-
-	Strontium nivate, 50-15 bgs., c.l., works	51.50	-
_	Styrene-acrylenitrile resin, nat, bulk,	23 77	.27
-	f o b. plant	.77 77	.81 .81
_	Succinic acid, puril., cryst dms, t.l.,	2 35	-
nded by	frt. alid	2 00 1 71	2 10
9 75 -	Sucrose, rold , white, bogs , c l , l o b.	33 10	-
-	refy.E 100 lbq Sucrose acelate, isobutyrate, 90° o dms. i.i. divd lb.	1.18	_
6.00	tanks, divd	1.10	Ξ
1.00	grade, 100-lb. dms , f.o.b.	12.50	13 50
4.00 3.00	works	39 50	-
0.00	klios	25 00 20.00	23.50
-	Sulfadiazine, USP, powd. dms., 500	53.00	_
-	kilos. kilo. Sulfadiazine-sodium, USP, dms., 500 kilos. kilo.	40.70	-
-	kilos	33.50 32.00	Ξ
-	Sulfamethazina-sodium, USP, powd dms., 50 kilos kilo.	13.00	_
-	Sulfamethazine, powder, dms., 500 kilos	9.00	10.00
	Sullamic soid, cryst., bgs., c.l., t.l., works 100 bs., Sullamic soid, gran., dms., c.l., t.l.,	38.00	41.00
	worksib. Sulfanitamide.NF. reg. 1,000-ib. dms	.38	-
-	frt. equald	2.00 .67½	-
	Sulfaquinoxalina, veterinary, grade, drns.,	8.00	_
-	Sulfur, crude, bright, molten, dom., f.o.b. vessels, Gulfports long-ton		120.00
=	f.o.b. i.a. rely	120,00 120,00 135.00	122.00 122.00 -
-	f.o.b. banke, Alberta, Canada, for US delivery	80.00	85.00
=	dark, ex-Tampa, Fis long-ion Tampa price subject to \$10 per lo most customers.	152.50 ng-ton disc	ount for
-	Sulfur, crude, 99.5% min. purity, comi. ficur. 60-lb. bas c.l., mines		
5.50	basis 100 lbs. kmp, same basis 100 lbs. Sulfur, reld., 99.5% min. purity, rolls	13.60 13.60	Ξ.
-	I SU-ID. DAGIS. C.I IJUI IUS VA.	17.50	<u>.</u> .
-	als	20.00	· _
-	Suifur, reid. sublimed, NF, 99,85% min. punity, S-B. bgs., c.l. mines basis	26.00	<u>.</u>
=	Sulfur, rubbermakers, 99.5% min. pu- rity, comi., reg., 50-lb. bgs.		• •
	rity, comi., reg., 50-b. bgs., o.i., mines basis 100 bs. fine, 98% min. prasing through 325	14.60	<u>-</u> :
Ξ.	mesh, same basis 199 ibs. Sulfur dichloride, drifs., c.l., works, fri.	16,60	· •
360°F-	equald	1744	7. 1
1.35	workston Sulfur monochichide, dms., c.L., works,	230.00	

CH	EM	ICA	\L
PR	ICE	2	

WEEK ENDING DEC 10 1000

Sulfuric acid, virgin 100% tanka, works,		
East Coast ton	71.75	95.90
Gulf Coast ton	75.00	86.40
Midwest ton	80.25	_
Southeastton	68.15	-
West Coast ton	85.00	_
NOTE: For prices on 60 and 66 Be.,	multiply by	.7767
.9319, respectively. For price of	20% fumby	g Cleum,
is, add \$3-\$4 to above prices and		1.045.
Sulfunc acid, smalter, 100% tanks, work	k9,	
Guil Coast ton	48.00	52.00
New Mexico ton	20.00	25.00
Southeast ton	63.15	-
93%, tanks, divd., Northwest ton	60.CO	85.00
Sunflowerseed oil, crude, (.o.b. Min-		
neapolis	1472	.15
Superphosphate, triple, 46% or more.		
a.p.a., run-of-pile, bulk, c.l.,		
	2.75	3.05
Fig unit-ton bulk, gran., c.l., Fig	~	165.00

iunnowerseed oli, crude, f.o.b. Min-	1472	.15	d-a-
iuperphosphate, triple, 46% or more,		•	de-
a.p.a., run-of-pile, bulk, c.l., Fiaunit-ion	2.75	3.05	d⊩a-To
bulk, gran., c.l., Fla ton	180.00	165.00	di-a-Tox
			dn
			50% dry Tolu balsai
			Toluene, pe
			Atla
			Baye Baye
			Chic
le dese and New York has all	بنحصنند		Clair
alo, dom., grd. New York bgs., c.l., works ton	84.00	_	Dee FL V
99.5%, 325 mesh, bgs., c.l.,	01.00		Gulf
works ton	84.00	90.00	Hou
'alc, dom., 99.5%, 400 mesh, mi- cronized, bgs., c.t., works ton	187.00	238.00	New
625 mesh, micronized, bgs.,	101.00	200.00	Phili Prov
c.l., works ton	200.00	-	Toluene di-
dom., ord., Calif. grd., bga., c.l.,	90.00	_	809
ord., Vermont, off-color grd., bgs.	30.00	•	jum p-Tolvene
c.l., works ton	136.00	-	t.l.
imp., Canadian, grd., bgs., c.l.,	70.00	84.00	m-Toluidin
workston all oil, crude, Southeast, tanks,	70.00	04.00	o-Tolukline bulk, sar
works, frt. equald ton	90.00	100.00	p-Toluidin
all oil, retd., acid, same basis ib	.31	- 00	d.,\
dat, lanks, same basis b. Bill of acids, 2% or more rosin, tanks,	.19	.23	Liq., ti flake, se
works, frt. equald lb.	.201/2	.231/2	Toluidines
less than 2% rosin acid	.22	.27	.ا.ه
allow (see Offs, Fels & Waxes market: allow, fatty acids, tech., non-ret.	eport.j		bulk sen Tolytriazo
dms.,c.i., divdib.	.37	.40	Cin
tanks, divd	.29	.45	Tonka bi
hydrogenated, tech., llake, bgs., c.l., dvdlb.	.37	.33	Townshop
tanks, divd	.35	.42	Toxaphen Tragecanti
fangenne oil, Fla., dms. f.o.b	8.50	9.50	flaked p
italian, dms kilo   Fankage, animal feeding, 9-11%, NH <sub>2</sub>	52.90	-	Triacetin to
New York, bulk unit-ton	5.50	-	Tributyl o
lankage, fert. grade (see Nitrogenous ;	process tan	kage).	TributyIpt
Tannic acid, NF, fluffy, bbls., 1,000-lib. lotslb.	8.09	_	Tributylan
lechgowddmsth	4.62	_	tanka, s Trichtoro
Tar add oil. 15-18% t.l., dms., l.o.b			dm
worksgal. 25-28%.t.l., dms., f.o.b. works. gal.	1.40 1.59	-	USP, 10
50-53%, t.t., dms , f.o.b. works , gal.	1.87	_	1,2,4-Tric
Tartaric acid, NF, bgs.,	1.20	1.50	1,1,1-Tric
Tefurium, metallurgical, i.o.b. works ib. Terpinhydrate, NF, imp., cryst., powd.,	12.00	-	61.1,2-Tric
36 kilo drums, f.o.b. ship. pt.,			WC
fri. equald	1.35		Trichloroe
erpineol		1.50	Trichtoros
prime, dms	. 1.35	2.05	1 Trichpine
Ferpinyl propionate, dms lb.	. 4.50	_	dn dn
l'etrechioroethylene, tech. (see Perchi l'etrechioroethylene, USP, dins., c.l.,	oroethytene	).	Tricresyl
Li, works	30%	٠ -	Tridecyla
Tetraethyl orthosilicate, bulk, f.o.b.			l dh
works	. 1.53 67	1.66	Triethonol
l'atrasthylene glycol diacrylate, t.i		-	Triethand
dms., f.o.b. works,	. 1.50	-	f.c
Tetraethylenepentamine, tanks, same basis	8	1 7E	Triethyla
Tetraethylthluram disulfide, tech.	, 1. <b>/U</b>	1.75	tanke, Triethyl
fiake, dms., i.l., irt. alid ib	.68	2.07	W
Cetrahydrofuran dms., c.l., t.l., f.o.b			Triethyl p
worksib tanks, same basisib	). 1.02 )96	-	Triethyle Triethyle
ietrahydrofurfuryi alcohol tanka, f.o.b	<b>)</b> .	_	f,
Memphis, Tenn	a90	-	40-60
Fetrahydrolinatool, syn., dms	o. 7.20	-	Triethyler
c.i., t.i. f.o.b. works	o65	_	M-ost-nT I
Tetrapolassium phosphate (see Polassi:	um phosphai	le, tetrabasic).	Tri-isobu
Tetrasodium pyrophosphate (see So tetrabasic.)		nosphate,	Tri-isopi a
halium metal, divdk	b. 35.00	_	Trimeth
Thatium sulfate, 99%, bots., civd. ki	la 140.00		
Theobromine, bulk f.o.b. works kii Theophylline I ISP enhyd 50. kii	to 140.00	150.00	25%
Theophylline, USP, anhyd. 50-kij dms., 10,000-k <b>i</b> o lota ki	io lo 12.00	12.95	40%
Thiamine hydrochloride, USP 100- kil	lo		
dms., divd	o. <b>33.00</b>	-	I Inmeur
hiamine mononitrate, USP, 100-kilo dms., dlyd	)., o. <b>33.00</b>	_	Trimett
fhiodiphenol, 98%, dms., f.o.t	<b>D</b> .		Tripenta
worksli	b. 3.35	-	Triphen
Thioflavin green toners, molybdated PMA, dms	d, b. <b>5.40</b>	6.05	Triprop
tungstated, PTA, dms	b. 5.60		Tris-(hy
Thioglycolic acid, refd., dms., ton lot	ts		1 1
100% acid basis,		-	Trisodiu I-Trypto
reds, driis Irt. aid			Tungoi

			Turmeric, Alleppey over 6% b.	.67	-
orium nitrate, puril., dms., 100-fb.	2.75	_	Turpentine, crude sulfate tanks, f.o.b.		
lots or more, works(b.	128.00		Southeast works gal.	.90	1.00
Threonine, dms 10 kilos wks kilo	1.45	_		التناصبون	
yme leaves, French, bgs b.		-			
Spanish, bgsb.	.75	_			
yme oil, NiF, red, dms kilo	20.00	_	1 🖪 📑		
VF, white, dms kilo	22.00	B.15			
ymol, NFb.	3.75	Q. 13	18.5		
ymol lodide, dms., 100-lbs. f.e.b.	E0 60	56.20			
works	52,30	30.ZU			
metal (NY composite)	N.A.	_	550 0.000		
anium dioxide, anatase, bgs., 20-	~~	70	Ultramerine blue pigments, 550- 2,000	1.30	_
ton lote, frt. alld	.77	.79	lb -lots, works	2.20	
slurry stalpments, 50-ton lots, dry ba-	70		violet, same basis	2.20	_
sis, irt. alidib.	.78	-	Umber pigment, burnt, American, Irt. equaldb.	.131/2	.16
anium dioxide, rutile, reg., bgs., 20-			BQUBIO	.1012	.10
ton lote, frt. alid lb.	.81	.84	raw, American, dom., bgs., i.c.l., same basisbb.	.1314	.14
slurry shipments, 50 ton lots,			Undecylenic acid, dms., workslb.	2.70	
dry basis, irt. alidib.	.84	_	Urea, 48% N, ind., bulk, Gulf Coast,	2	
on-chalking rutile material coats 1c. p	er bornua u	ютв.	50-tong.lion	200.00	_
anium hydride powd. electronics			46% N. agricultural, barges, f.o.b.		
grade, dms b.	26.50	-	Guit Coast, granular ton	75.00	80.00
antum tetrachloride, tech., bulk, c.l.,			46% N, agricultural, 1.o.b. Midwest termi-		
f.o.b. works b.	.30	.35	nele, granularton	100.00	-
200-gal cylinders c.l., same basis ib.	.60	-	Uva-Ursi leaves, bis lb.	.22	-
anium sponge, 99.3%, fiber drums,			Old Distributed Co.		
less then 5,000 lbs. f.o.b.					
wksb.	4.85	-			
blas acid, 2,000 lbs. or more lb.	2.45	-			
-Tocopherois, 67%, dms kilo	50.0B	-			
-Tocopheryl acetate, 81% conc.,					
drnakilo	57.49	-			
-Tocopheryl acid succinate, cryst.,					
ornakilo	78.44	-	المستحد المنتسبيس		_
-Tocopherol, dms kilo.	27.40	-	Valerian root, Belgian, bgs jb.	.65	.85
Tocopheryl acetate, USP 50-kilo			Indian.bgsb.	.45	-
dm. 1000 kilo min kilo.	16.00	18.50	Vanadium oxytrichlorida, 3,000 lb.		
i0% dry powd., 50-kilo dm kilo	17.00	_	cyls works	5.40	-
u balsam, ons	7.60	8.68	Vanadium pentoxide, tech., gran., per lb.		
uene, petroleum, ind. or nitration, tan	ika		of V <sub>2</sub> O <sub>3</sub> , 550-lb. drns., works. lb.	4.10	4.94

1.80 1.70 1.95

2.90

1.65 1.39 1.33

1.80

.27¼ 1.33 1.20

.571/2

1.78

<b>V</b>		
Valerian root, Belgian, bgs ib.	.65	.85
Indian.bgslb.	.45	-
Indian.bgs	- 40	
CVIS WORKS	5.40	-
Vanadium pentoxida, tech., gran., per lb.	4.10	4.94
of $V_2O_3$ , 550-lb. dms., works lb. fused or flake, per lb. $V_2O_5$ , 550-	7.10	7.07
Ro. cima works lb.	3.35	3.65
/andyke brown, bags., i.l., irt. equald. lb.	.2714	-
Vanilla beans, Medagascar No.	37.00	
Java, tinsb. Venilin, USP, dms., f.o.b worksib.	27.00 6.25	30.00
imp., dms	4.75	5.00
Versinoi Ag	.84	-
Vetiveryl acetate, dms kilo	60.50	-
extralb.	63.00	-
Veliver oil, Bourbon, dms ib.	49.00	-
Chinese	18.00	-
Haltian lb.	26.50	24.00
Victoria blue toners, molybdated, PMA	32.00	34.00
dmslb.	6.20	6.30
tungstated, PTA, dms	10.40	
Vinyl acetate monomer, tanks, divd. lb.	.39	_
Vinyl chloride monomer, polymer		
grade, tanks, I.o.b. works lb.	.28	-
Vinyl ether, USP, aneathesia, 75-cc.	4 50	
bots, hospitalsbota.	1.56 7.81	-
2-Vinylpyridine t.l., dms. works kilo. tanke, works	7.61	-
Vinyltaluene, bulk, f.o.b	.67	.731/2
Vitamin A. synthetic, dry, pharm., 500,000		
A units per gm., 50- kilo lots . kilo	33.00	-
Vitamin A, liq. in oil, pharm., 1,000,000 A		
unita per gram, 10 kilo lots . kilo	41.00	-
Vitamin A, feed grade, 650,000 units	10 70	23.85
per gmklio. Vitamin B, (see Thiamine hydrochloride).	18.70	23.05
Vitamin B <sub>12</sub> (see Ribollavin ar	nd Yeasil.	
Vitamin B <sub>12</sub> , cryst., non-sterile, USP	,.	
(cyanocobalamin), viais, 50-		
gram, lotsgram Vitamin B <sub>12</sub> .1% inturation of cryst. B <sub>12</sub>	B.QD	9.75
Vitamin B <sub>12</sub> .1% inturation of cryst B <sub>12</sub>		
(cyanocobalamin USP) with dical-	10.75	10.76
cium phosphate, 25-kilo dms. kilo. Vitamin B <sub>12</sub> , 0.1% trituration of cryst.	10.75	12.75
B <sub>12</sub> (cyanocobalamin USP) with		
mannitol, 25-kilo, dms kilo.	15.80	_
Vitamin B <sub>12</sub> , cobalamin concentrate NF		
with mannitol. 1,000 mcg, per gram, dms, per gram activity		
gram, dms, per gram activity	19.45	-
Vitamin B <sub>12</sub> , 1% Vitamin B <sub>12</sub> , USP, ab-		
sorbed on resin, 5-kilo dms., 500- gram lots, irt.alid. per gram activity	15.65	_
Vitamin B <sub>12</sub> , 1% cobalamin concentrate.	10.00	-
NF, absorbed on resin, 5-kilo		
dms., irt. elid. per gram activity	15.40	-
Vitamin B <sub>12</sub> , 1% cyanocobalamin in	_	

W		
Warfarin 0.5%, dms., ton lots, frt. alid.	_	
New York or Chicago Vo.	.75	_
Wheat germ oil, cold-pressedgal.	16.50	17.50
cold-processed	14.00	_
White precipitate, USP, powd., 100-lb.		
drifts., 1.0.b. works	7.892	11.24
Whiting (see Calcium carbonate).		
Wintergreen oil, syn. (see Methyl asilcyls		
Witch hazel bark, bis	1.35	-
leaves, bis	1.75	-
400 mesh, bgs., c.l. works ton	134.00	-
325 mesh, bgs., a.l. works ton	117.00	-
high aspect ratio, bgs., works ton	164.00	-
Wollastonite, t.L., f.o.b., producing		
plant, general grade ton	200.00	
325 meshton	140.00	141.00
400 meshton	160.00	-
1250 meshton Wool grease, USP (see Landin).	600.00	-
Wormseed oil (see Chanopodium oil, NF	٦.	
Wormwood off, cns	"	
	31.00	
V		

(enthan gum, food 300-lb. dma., f.o.b.

- 1	Xylene, petroleum, Ind. or nitration, tanks		
	Alliance, La., f.o b gal.		
1.00	Atlanta, Ga., dlvdgal.	.76%	-
	Bayonne, N.J., dlvdgal.	.761/2	-
	Bayonne, N.J. f.o.b gal.	.761/2	-
	Baytown, Tex., f.o.b. ga).	.761/2	-
	Chicago, iR., divdgat	.7672	-
	Cinicago, in., divo	.761/2	-
	Clairton, Pa	.761/2	~
	Ft. Wayne, Ind., divd gal.	.761/2	-
	Gulf Coast, spot, barges gal.	.78	.80
	Houston, Tex., dvd get	.7672	_
	New Jersey Metro, divd gal.	.761/2	_
	Philadelphia, Pa., dlvdgal.	1.38	_
-	Providence, R.I., divd gal.	1.42	_
-	South Bend, Ind., divdget	1.37	-
.16%	m-Xylene, high purity, tanks, f.o.b.		
.1012	Texas City, Tex	.36	_
4 492	o-Xviene lanks, works	.13%	_
.1414	p-Xviene, tanks, divd	.19	- 5
-	m-Xylenediamine, dms., t.i., f.o.b.		-
	l worksh	1.70	
-	2,4-Xyfidine, tech., fig., c.l., t.l. f.o.b.		-
	worksb.	1.50	
0.00	Xylidinea, mixed, o-m-p., dms., c.l., t.l.,	1.00	-
	f.o.b. works	1 00	
-	1.0.0. W. M	1.00	-
-			
_			
	1 <b>W</b>		1.
	I <b>T</b>		

Y	_	_
Yara yara, 25-lb. cns	2.81	-
charomycas, t.l., f.o.b. works . fb.	1.10	_
Yerba, santa leaves, bis ib.	2.40	
extra, bots	26,50	31.7
Ylang-ylang oil, extra gradeb.	38.50	
grade 1	25.00	-
grade 2 lb.	25.00	-
grade 3	22.00	-

l	grade 3	22.00	-
	<b>Z</b>		
	Zein, bgs., 2,000-lb, lotslb.	7.50	9.3
	Zinc acetate, NF, dms	1.00	1.7
	tech., dhydrate, bgs., t.l., works. lb.	1.60	
1	Zinc borate, tech., 43% ZnO, 37%		
	B <sub>2</sub> O <sub>3</sub> , 50-lb. bgs., 20,000-lb. t.l.,		
	f.o.b. workslb	.55	-
	cryst., 37% ZnO, 49% B <sub>2</sub> O <sub>3</sub> , 250-lb.		
	dms. 20,000 lbs. t.l. (.g.b. wks. lb.	.69	-
	Zinc chloride, USP, gran., dms kilo	9.79	-
	Zinc chloride, tech., soin. 50%,		
	tanks, f.o.b. Cleveland.		
	Ohio 100 lbs.	20.20	-
1/2	Concord. N.C 100 lbs.	20.20	-
	Freeport, Tex 100 lbs.	20.20	-
	Old Bridge, N.J 100 lbs	20.20	-
	65 degree, same basis Cleveland,		
	Onio	27.90	
	Concord, N.C 100 lbs.	27.90 27.90	
•	Old Bridge, N.J 100 lbs.	27.80	
	70 degree, same basis Cleveland,	29.70	_
	Onlo	29.70	
	Concord, NC 100 lbs. Old Bridge, NJ 100 lbs.	29.70	
5	72 degree, same basis Cleveland.	20.70	
	Ohlo 100 lbs.	33.20	-
	Concord, NC 100 lbs.	33.20	
j	Old Bridge, NJ 100 lbs.	33.20	
	Zino chromate, bgs., divd lb.	1.12	
	Zinc cyanide, dms., c.l	1.65	2.
	Zinc dust pigment type 1 & 2, dms., c.l.,		
	1.o.b. plant	.69	
	Zinc ethylenediamine tetracetic acid.		
	6.4% Zn., ammonia sait soin.,	.56	
	l.c., t. t., f.o.b. works lb.	.00	
	9% Zn., ammonia sait soln., t.c., t.t.,	.48	
	f.a.b. works	.40	
	Zinc fluoborate, liq. conc., dma., t.l.,	.66	
	works, frt. aquald	.47	
	Zinc metal, high grade, divd lb. Zinc naphthenale, iq. 8% Zn., dms.,		
	I ZIIC IMPRIMATION, N. 076 ZII, CITO,	OE	

l	gelatin, 2.5-kilo dms., frt. aldper gram activity 15.40 – Vitamin C (see Ascorbic acid).	Zinc naphthenate, iq. 8% Zn. cms., divd	.95 .34
	Vitamin D (see Cholecalciferol)	Zinc oxide photo conductive, bgs., c.i., frt. alid	.50
	Vitamin D₂ (see Codiver and Fishliver oils). Vitamin E (see a-Tocopherol and Wheat germ oil). Vitamin H (see Biotin).	Zinc oxido, USP 50-lb. bxs., c.i., m. alid	.59
l	Violet methyl toner (see Methyl violet toner)	Zinc oxide pigment, American process, lead-free bgs., c.l., frt. alidib.	.57
l	7 1 1	Zino oxide pigment, French process regular, bas., c.l., frt, elidlb.	.55
l	<b>VA</b>	Zinc phenoisulfonate, purit., grain. 250-b. dms. t.l. irt. slid ib.	1.82
١	W	Zinc pyridinethione, 48% dispersion, dms., f.o.b. works ib. industrial grade	8.50 14.50
Ì	Warfarin 0.5%, dms., ton lots, frt. alid.	Zinc resinate precip. 7.2-7.676 Zin.	.45
l	New York or Chicago ib	Zinc silicolluoride, dms., C.I., L.I.,	.17 .92
	cold-processed	Zinc stearate, USP, bulk, t.l.,	.02
۱	drns., f.o.b. works	dust, grade 38% Zn., bgs., c.l., works 100 bs.	30.00
	Wintergreen oil, syn. (see Methyl sellcylete)	i acricultural crade DOWG., DVIN	26.50
1	witch hazel bark, big b. 1.35 -	same basis 100 lbs. Zino yelow (see Zino chromate).	
ı	leaves, b/s	Zinc-ammonium chioride, bgs., c.l.,	40
Į	325 mesh, bgs., c.l. works ton 117.00 -	I WARR	.42 4.67
ı	nigh aspect ratio, bos., works ton 164.00	7 Tocumbersia dma. WORKS IV.	4.01
	Wollastonita, t.L., f.o.b., producing	Zinc-formeldehyde sulfoxylate, basic	1.05

6.20

		Zino dentatol Braintino	
7.892	11.24	l dust reads 38% Zn., 005,, C.h.	30.00
		works 100 lbs.	00
).		agricultural grade powd., bulk,	26.50
" 1.35			20.00
	_	Zino yellow (see Zino chromate).	
1.75	-	Zinc-ammonium chioride, bgs., c.l.,	
34.00	-	Zing-aminonium chionas, også	.42
17.00	-		4.67
64.00	-	Zinc undecylenate, dms., works ib.	
		l 7156.krmskiskiskis 911RDXVII.Us. 1995	1.05
200.00	_		165.00
40.00	444 00	I Tirron aren has hulk al. Works, wii	100.00
	141.00	Zircon miled bgs., 200 and 325 mesh,	
60.00	-	o.l., workston	225.00
500.00	-	0.1., WORKS.	
		Zirconium acetate soin., 25% ZrO <sub>2</sub> , dms.,	.97
			.78
31.00	_	I 9294.7€0 gama basis	
01.00		L 7 months hwydda 1986. Greyv ""	.31
		I Theodorum cyldo nowo. (2011). Ville	4 OF
		2,000 ibs. min	4.25
		2,000 los. mais.	7.25
		electronic, same basis	
			3.31
		I leadeles intermited acousers	3.65
			2.00
		Design of come hasts D	2.82

177.00

3.82

3.75

CENTRIFUGES

p400 Sharples, 316 S/S RECONDITIONED p400 Sharples, 316 S/S, (5) p400 Sharples, 316 S/S, RECONDITIONED p400 Sharples, 316 S/S, RECONDITIONED p400 Sharples, 316 S/S, reconditioned by mfr. W\*150" Bird, 304 S/S, reconditioned by mfr. W\*150" Bird, 304 S/S, 10° contour p400 SS, 316 S/S p40 SS, 316 SS, 316 S/S p40 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 SS, 316 MENT Alia-Laval, 316 S/S construction MPX-213 Alfa-Laval, 316 S/S construction MOWH-3036 Westfalia, sanitary., S/S 14-142-176 Westfalia, Pilot Plant 3 way S/S \$0,412-175 Westfalia, Pilot Plant 3 way S/S \$4-102-175 Westfalia, Pilot Plant 3 way S/S \$4-104-175 Westfalia, Pilot Plant 3 way S/S \$4-102-175 Westfalia, Pilot Plant 3 way S/S \$4-104-175 Westfalia,

> **SZEGVARI ATTRITOR** क्षुब्ध Szegvari, jacketed, stainless steel

PRESSURE FILTERS Wee, ft. Durco-Enzinger, Model 60DHC489, 316SS Wee, ft. Niagara Model 370-348, 304SS 122854, ft. Funda Model R-30, 316 S/S, jktd., 40 HP ा है, सं. Niagara, model 33-12-5, S/S jktd. (2) अंक, सं. Niagara, Model 42-310-22, 304 S/S 勝れたPronto, Model 3259, S/S (2) 単点化 Sparkler, Model 33530, S/S (2)

**VACUUM FILTERS** Frist Ametek, 316 ELC S/S LIKE NEW CONDITION the Eimco, precoat "Eimcomet" construction (3) is Ametek, polypropylene is Paxman, 316 S/S, precoat Fx12" Elmco, 316 S/S, precoat

**REACTORS-TANKS** \$6,6/L Reactors, up to 5000 gal. capacity, links up to 15,000 gal. capacity (100's in stock) (\$/\$, G/L, C/\$, FRP)

HORIZONTAL BELT FILTERS (1) Eimco, rubber belt, vacuum (2) (112 Elmco, rubber belt, vacuum (2) กันใช้ Straightline, rubber belt, complete กัน" Straightline, rubber belt, complete ใน" Einco, rubber belt, complete

**BELT FLAKERS** l light of the state of the s

FITZ CHILSONATOR to 16 x 30 Fitzpatrick Chilsonator System, all S/S matricilon, with size 30 granulator, with drives

BALL/PEBBLE MILLS ht Patterson Jacketed Steel Ball Mill, 30 H.P. ht Patterson Pebble Mill, cricite lined

SAND MILLS The Premier Susameyer Sand Mill, complete 12-30 Morehouse-Cowies Sand Mill, 50 H.P. 16-25 Morehouse-Cowies Sand Mills, 25 H.P. (2) 18-7 Chicago Boiler "Red Head" 30 H.P. 18-6 Chicago Boiler "Red Head," 1 H.P.

LAB 3 ROLL MILLS J'12" J.H. Day, high speed, complete "18" Kent, high speed, complete

ALL NICKLE CONSTRUCTION Agai. Nooter Reactors, 30/50 PSI (2) Maq. ft. U.S. Autolet Pressure Filter 17 at, it. Sparkler Pressure Filter, Model 33-8-19 144 Ametek Rotary Vacuum Filter

**JUST PURCHASED** 

7500 gal. Terre Haute Fermenters, 304 8/8, 50 pei (5) 4000 gal. horizontal batch still, 8/8 4000 gal. horizontal batch still, \$/8 2500 gal. Hicks tanks, 316L \$/\$, 50 psl or F/V 2000 gal. Noctor reactors, 316L \$/\$, 60/90 psl (8) 2000 gal. Pfaudier reactor, 316L \$/\$, 60/90 psl 2000 gal. Mueller reactor, 316L \$/\$, 60/90 psl 2000 gal. Horizontal batch still, \$/\$ (2) 1250 gal. \$/\$ Mix Tanks, 10 HP Vari- Drive (2) Misc. G/L tanks and kettles, to 3000 gal. (8) ST 100 Aeromatic Fluid Bed Dryer, all S/S

SOME DEPOSITE OF STREET भिक्तिक प्रमुख । पुर्व विकास विभिन्न हो । अस्तु स्वर्यक ने प्रियम् । अस्तु स्वर्यक ने प्रसिद्ध विभाग हो । त्री कराने विकेषी , देशक जानेनुका करानि है विकेष्ट **क**े हैं के **देश हैं है।** the other of the other and united by the party of the continues of the other of the other of the other of the other of the other oth ्रीतिक । १४ व्यं अकेन्द्र १ व (व ...) विशेषणात्रीति केन्द्रमानित्र । ११० २५ मीनको १ - है विकास १ एसई सन्दर्शनानेमकारी से हुन्द्रीतिकारी er alleger besteatte 1996 av elleger Statistischer and elleger and betrette

### **RESIN MFG. EQUIPMENT— OHIO LOCATION**

5000 gal. Struthers-Wells Reactor System, 347 S/S, 50 PSI or full vacuum Internal, 75 PSI jacketed, 700°F, turbine agitator, with condensor, receiver, piping, 15,000 gal. Stainless Steel Tank, vertical, with interna coils, top entering 40 H.P. turbine agitator
200 gal. Baker-Perkins Mixers, size 17GIM, type 304
stainless steel construction, fully jacketed, duplex

dispersion blades, screw tilt, 40 H.P. (5) 35 gal. Patterson "Kneadermaster" Mixers, 304 stain-less steel, sigma blades, jacketed, 40 H.P. (5) 100 H.P. Sprout-Waldron Hammermills, Model CG-28 (5) 28" dla. Reitz Thermascrews, 304 S/S, jacketed trough 28' long, 15 H.P. varldrive (2) 40"x84" Patterson Screens, 1 deck, S/S (9)

IMMEDIATE AVAILABILITY-CALL FOR DETAIL!

# **NEW LIQUIDATION**

Ohio Location PVC Suspension Plant 11-5,000 gal. Pfaudier Reactors, C/S construction, rated 220 PSI Internal, 80 PSI Jacket, 50/25 H.P. Philadelphia **Gear Drive** 

Complete Nara Vertical Fluid Bed Dryer System, all S/S, 6'7" x 22'1", 2 stage, rated up to 10,000 #/hr., with heaters, blowers, cyclones Complete Proctor Vertical Flash Dryer System, all S/S, 3'1'

x 117'2", with heater, blower cyclones
20,000 gal. Stainless Steel Mix Tanks, 13'6"x19', 20 H.P. (2)
16,000 gal. Stainless Steel Mix Tank, 12'x18'4", 10 H.P. (1)
15,000 gal. Stainless Steel Mix Tank, 9'6"x27'6" 40 H.P. (1)
8,500 gal. Stainless Steel Tank, 9'6"x15'2" (1) 8,000 gai. Glascote Vacuum Receiver, Glass-Lined (1) 6,500 gai. Glascote Vacuum Receiver, Glass-Lined (1) 2,250 gai. Stainless Steel Kettles, 6'8''x8', jacketed, 10

2,250 gal. Stainless Steel Kettles, 6'8"x 8', jacketed, 3 H.P

(2)
2,000 gal. Stainless Steel Mix Tanks, 6'x8'4", 2 H.P. (3)
1,000 gal. Stainless Steel Kettles, 5'4"x6', jacketed, 2 H.P.
1,000 gal. Stainless Steel Jacketed Tanks, 5'4"x6' (2)
4-A.O. Smith Silos, Glass-Lined, 14'x40', bolted 4-A.O. Smith 51108, Glass-Lined, 14 x40 , bolted
1-Butler, Epoxy-Lined, 9'x32' welded
220 CFM Sullaire Compressor, 125 PSI, rotary screw design
117 sq. ft. Milkro Pulsair Collector, Model 259-6-30, S/S
Derrick Screen, single deck, 3'x5'
Misc. tanks, feeders, blowers, cyclones, pumps

# REACTORS

5000 gal. Struthers-Wells, 347 S/S, 50#/75# 3300 gal. Acme, 304 SS, 74#/76# (2) 2750 gal. Acme, 304 S/S, 74#/36# (2) 2000 Colonial, 316 S/S, 100#/100#, w/coll 2000 Colonial, 316 5/5, 100#/100#, w/coll 2500 gal. Cryochem, 316 S/S, 75#/75#, with coll 1600 gal. Perry Products, 316 S/S, 75#/150# 760 gal. Pfaudier, Glass-Lined, 100#/90# 200 gal. Pfaudier, 316 S/S, 55#/60# UNUSED 200 gal. Pfaudier, 316 S/S, 55#/50# UNUSED 50 gal. Pfaudier, Glass-Lined, 25#/90# complete sys-tem, with receiver & condenser 30 gal. Pfaudier, 316 S/S, 60#/90# UNUSED 30 gal. Pfaudier, Glass-Lined, 25#/90# 10 gal. Pfaudier, Glass-Lined, 150#/85# 5 gal. Pfaudier, 316 S/S, 50#/80#

# S/S PULVERIZERS

60 ACM Mikro Mill, 75 H.P.
PC-38 Strong-Scott Pulvacon, 150 H.P.
FASO-20 Fitzpatrick "Fitzmill", 75 H.P. (1)
D-6 Fitzpatrick "Fitzmill", 7½ H.P. (2) Manesty "Rotogran" Oscillating Granulator

### **UNUSED NIRO DRYERS**

33' dia. Niro Spray Dryera, 316 S/S, UNUSED (2) complete spray drying facility, never installed, including (2) 33' dia. chamber, Model F-350 centrifugal atomizers. All equipment new 1978, as shipped from Niro awaiting installation.

10' dia Niro Fluid Bed Dryer, 304 S/S, UNUSED, complete system with drying chamber, heating-cooling systems, feed tanks, cyclone collectors, all piping.

### **VACUUM DRYERS**

375 cu. ft. Stehning, Double Cone, S/S (9) 175 cu. ft. Venuleth, Double Cone, S/S (3) 60 cu. ft. DeDeitrich, Double Cone glass lined 50 cu. ft.F.J. Stokes Double Cone, 304 S/S 40 cu. ft. F.J. Stokes, Rotary, Vacuum, 30"x8', S/S 21 cu. ft. Balfour, Double Cone, glas lined 20"x10' Zimmer dble. screw Holofiltes, S/S jktd.,vac. (3)

# MIXERS

50 gal. B-P, C/S, Sigma jacketed vac., 30 H.P. % gal. J.H.Day "Titan," Sigma jacketed, 3 H.P. 70 cu. ft. fJ.H.Day, Nauta, S/S, jacketed, UNUSED 200 gal. B-P, C/S, sigma, jacketed, vac., 75 H.P. (3)
75 liter Papenmeir Mixer, S/S, jacketed, 30 H.P. varidrive
8 cu. ft. Kelley Duplex, paddle, S/S, NEW
3.5 cu. ft. J.H. Day, Nauta, S/S

### DISPERSERS

50 H.P. Cowles, vari speed. Like New

LAB 2 ROLL MILLS

8"x16" Reliable Leb Mill, 15 H.P., Like New 8"x16" Farrel Leb Mill, electrically heated, variable speed, variable friction 8"x13" Farrell Lab Mill, 10 HP drive 3"x7" Farrell Lab Mill, oil heated, variable speed

## LITTLEFORD MIXERS

FKM 6000 D, 169 cu. ft., carbon steel, 4choppers FKM 8000 D, 169 cu. ft., carbon steel KM 4200 D, 86 cu. ft., jacketed, stainless stee! FKM 3000 D, 65 cu. ft., Jacketed, stainless steel KM 2000 D, 43 cu. ft., jacketed, stainless steel FKM 600 D, 13 cu. ft. stainless steel w choppers (2) KM 300 D, 6 cu. ft. stainless steel FM 50, 1 cu. ft. stainless steel jktd., vac chopper, 5 H.P., vari drive, All XP. New Condition.

# S/S RIBBON BLENDERS

150 cu. ft. Areco, 40 H.P. 13 cu. ft. J.P. Devine, 3HP

# **ROSS PLANETARY MIXERS** 40 gal. Ross, HDM-40, S/S, jacketed, vacuum, 10 H.P.

varidrive (2) 25 gal. Ross, HDM-25, S/S, 15 H.P. varidrive

# **EVAPORATORS**

50 sq. ft. Artisan "Roto-therm" Evaporators, all S/S construction, F/V Internal, 150 PSI jacket (2) 4sq. ft. Kontro Adjust-O-Film S/S 1 sq. it. Artisan "Rototherm" Lab System, all S/8

# COMPACTING PRESSES

6½ ton Manesty, Model BB3A, 27 station 6½ ton Manesty, Model BB3A, 33 station 4 ton Manesty, Model F-3, single punch

## REFRIGERATION

200 ton Lewis Package Chiller, complete
30 ton Application Engineers, Package Chiller
15 ton Application Engineers, Package Chiller
10 ton Application Engineers, Package Chiller
7 ton Mayer Package Chiller
6 ton Peuchen Package Chiller, (2)

# **SCREENS**

48" Sweco, 5/S, 2-deck 30" Sweco, 5/S, 2-deck 18" Kason, 8/S, 1 deck, unused (3) 36"x96" Rex-Carrier, 1 deck, S/S (4) 20"x48" Rolex, 1 deck, S/S

# HEAT EXCHANGERS

Shell and tube heat exchangers, stainless steel, up to 2000 sq. ft. surface area-ci

100

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CALL US TODAY FOR A QUOTATION ON YOUR CURRENT NEEDS OR ADD US TO YOUR BIDDERS LIST FOR ANY FU-TURE PROJECT (201) 390-9550

### DRYERS

Drum Dryers/Flakers (1) 24" dia. x 36" Bullovac SS dble. drum (2) 32" dis.x 108" Blav Knox Cl dble, drum

dryer (1) 32"die. x 17'6" Sandvik SS belf flaker 1) 36"dia.x 10" Buflovak Ci dble, drum dryer 3) 42"dia.x120"Blaw Knox Ci dble, drum

) - dryer |(1) 48"dia.x 28" drum flaker, chrome plated (1) 48"dia.x 40" Ci flaker, mig. by Buffalo

Foundary (1) 48°dls.x 40 drum flaker, nickel plated

Fluid Bed SS (1) Füzpatrick Model FA 250, SS, 20 HP XP

Holoflite Wostern Precipitation Model P80980-A, twin screw, 12" dia. x 20" long, SS constr., Jckl. retod 15 psi, complete with 7.5 HP

vari-speed drive.

1) New/Never-Jeed Joy Processor, CS, single screw, 16"x16" long, rated 110 psi @ 340° F., sprocket & chain drive by 1.5 HP varispeed drive.

Rotary Vacuum (1) 200 Cu. Ft. Stokes, SS constr., compit. (2) 165 Cu. Ft. Pfaudier, Double Cone, G/L, 30 8FV/SD psi-jktd., 16 HP vari-drive (1) 150 Cu. Ft. Blaw Knox, Nickel (2) 132 Cu. Ft. Stokes, Nickel (1) 72 Cu. Ft. Staw Knox, SS (1) 60 Cu. Ft. Tlanlum Double Cone (1) 50 Cu. Ft. Glemco, 31638 sanitary, double cone

(1) 37.8 Sq. Ft. Hortz. Thin Film, vac. Int. & 150 paig, 304/31688 (1) 37 Cu. Ft. Gemco, SS (1) 30 Cu. Ft. P. Twin Shell, 30488 (1) 20 Cu. Ft. Abbe Twin Cone, 30488

Spray

(1) 30"x3' Bowen Laboratory w/3' cone bottom, \$8 constr., w/centritugal atomizer, 3 HP blower & motor.(1)
(1) Niro lab size 32"diax2"w/2'cone w/centrif. atomizer 86 contacts
(1) 18' dia. Bowen compit. system 86 contacts, new 1976

# CENTRIFUGES

) Delaval BRPX 309, 8S, 20HP ) Unused Model B-10 Podbielnisk, Alloy 20 ) Sharples AS-28, SS Sharples AS-16P, 31688 1) Alfa-Laval 89 Decenter, Hortz., Mdl. NX314 2) Dorr Oliver Mdl. CH30 CSU "Merco," 31688

contacis, 160 KP 1) Baker Perkins S-32 "Pusher Type," SS, 50 HP Bird 16" x 26", 316 ELC, contour bowl, Bird 24"x38", 31688, 40 HP

) Sherples P-3000, 31658, 30 HP ) Sherples P-1000, SS 20HP

O'x 20" Tolhurst centrifuge, Kynar lined, peri basket (1) Tolhurst 48" x 24" perf. basket, 31698

senitary, auto. plow & discharge, rated 55 #/cu. ft. @ 900 RPM, 20 HP XP.
Tolhurst 48" x 24" Betchmaster, 31688, peri. ater, 31688, peri. oasket, w/hydr. plow & 20 HP hydr. drive Tolhurst 48"x24" Batchmester, rubber lined

perf. beaket, w/hydr. plow & 20HP hydr. drive (2) Tolhurst 48" x 24" Balchmaster, Heresite lined, perf. basket, w/hydr. plow & 20 Hi hydr. drive

Western states 45"x 24", 316 88 Fletcher 48"x 28" Suspended type, SS peri. basket, 20/10 HP

Sharples Tornado 48" x 30", 31688, perf. backel, 40 HP XP i) Alia Laval Model MAPX 210 T24, SS wetled

2) Sharples C-27, 316 88, wetted parts, 40 HP 1) Sharples C-20, Super-D-Hydrator, 88, 30 HP 1) Dorr Oliver Mercene Screener Model C-400 X2, all 88, twin screw disch., 10 HP

PARTIAL LISTING ONLY

DISMANTLING

**RE-ERECTION** 

DEMOLITION

RIGGING

# **COFFEE PLANT LIQUIDATION**

(1) Mds. #DASO-6 Fitzmill w/15 HP motor, on stand.
(1) Mds. #D-6 Fitzmill w/15 HP main motor & 2 HP on stand.
(1) Mds. #20H Micro-Pulverizer.
(1) Mds. #3TH Micro-Pulverizer, SS, w/40 HP main motor & % HP screw

motors.
(1) Micro-Pulseir SS Reverse Jet Dust Collector, Model #64-S-6-20.
(1) 8" x 42" Yotator Scrapped Surface Heat Exchanger, w/5 HP motor &

(1) 8" x 42" Yotator Scrapped Surface Heat Exchanger, w/5 HP motor a lockt.

(1) 48" Sweco Single Deck Screen w/cover, S5 constr., 1 HP
(1) 32" w. x 5" ig. Witte Vibrating Conveyor, S5, w'cover, 2-deck.
(1) 2x6" Witte S5 Fluid Bed Oryer w/pert, blats.
(1) 32" W. x 13" Sendvick Beit Flatter, S5, 5" cooling section.
(1) Stokes Freeze Oryer System, compit. w/prebreaker, micro-vac. & York chiller.
(2) Jones Dewidering Presses.
(1) 1500 Gal. S5 Joktd. Mix Tank, 3 HP, dished top, flat bottom.
(2) 2000 Gal. S5 Mix Tanks, senitary fittings, % HP Lightnin.
(1) 2000 Gal. S5 Mix Tanks, senitary fittings, % HP Lightnin.
(1) 2000 Gal. S5 Storage Tank.
(2) 1800 Gal. S5 Storage Tank.
(3) 1800 Gal. S5 Storage Tank. egitator mount (no egitator)
(1) 1000 Gal. S5 Storage Tank, egitator mount (no egitator)
(1) 1000 Gal. S5 Birx Tanks, 3 HP Lightnin.
(2) 22" Dis. Spary Dryers, complete system.

FOR ADDITIONAL INFORMATION-CALLIDM TODAY...

(1) 1 Sq. FL Artistan "Kontro" Ajust-O-Film sys., 3168S (1) 1.4 Sq. FL Luwa Wiped Film, 3168S, 1.5 HP (1) 1.4 sq. FL Luwa thin film SS

(1) 20 Sq. Ft. Kontro Hortz. Adjust-O-Fitre, 316ELC, 50 palg, 15 (1) Approx 31 Sq. ft. Vert., Turbo-Film Processor, 304 BS Contacts (1) Litus New 37,8 Sq. Ft. Luws Hortz. Thin-Film Dryer, 304/316L

SS (1) 40 Sq. Fl. Kontro Adjunt-O-Film, SS constr., 20 HP (1) 47 Sq. Fl. Artisse rising Film, Hast. "C" (1) Approx 51 sq. ft. Pfeudier Wiped Film, 316 SS, 100/85 & FV (1) 80 Sq. Fl. Kontro Wiped Film Syst., SS constr., FV/150 pst.

(1) UNUSED 86 sq. ft. Luwa thin film dryer horiz, 318 L wetted parts, FV int., 150 pol sat sleam jkl. (1) 141 Sq. Fl. Rodney Hunt Turbo-Flim, 316 SS 15 pol int., 35 pol jkl 40 HP XP

Approx. 480 Cu. Ft. CS, 78HP UNUSED 460 Cu. Ft. Marion Peddie, CS, 75 HP 400 Cu. Ft. J. H. Dg Dbl, Ribbon Carbon Steel Contr. 40 HP (1) 300 Cu. Ft. CS Dbl. Cone 30 HP 200 Cu. Ft. KS 31 688 Dbl. Cone 175 Cu. Ft. J. H. Curin Sheil, 3168S 180 Cu. Ft. J. H. Quy Dbl. Ribbon Carbon Steel Contr. 25 HP (2) 69.3 Cu. Ft. CS Dbl. Cone, 7.5 HP 63 Cu. Ft. AUG 85 Bck. Turk Shell w/fort her 89.3 Cu. Ft. CS Bbl. Cone, 7.5 HP
63. Cu. Ft. Marion Paddie, CS
60 Cu. Ft. 304 SS P.K., Twin Shall, w/int. bar
60 Cu. Ft. 304 SS P.K., Twin Shall, w/int. bar
60 Cu. Ft. Gemeo Dbl. Cone, 304 SS
40 Cu. Ft. Gemeo SS
37 Cu. Ft. Gemeo SS
30 Cu. Ft. P.K. 304 SS, W/ig, bar.
20 Cu. Ft.P.K. Twin shall, SS
16 Cu. Ft. P.K. Soln SS
16 Cu. Ft. WC Marion SS
10 Cu. Ft. Gemeo dbl. cone, CS, 1 1/HP
10 Cu. Ft. Gemeo dbl. cone, CS, 1 1/HP
10 Cu. Ft. Gemeo dbl. cone, CS, 1 1/HP
10 Cu. Ft. Ft. SS, Dbl. Twin Shell 1 1/HP
10 Cu. Ft. Howse, CS, Dbl. Rbn.
5 Cu. Ft., SS, Dbl. Cone W/ilquid-solids ser
10" P.K. zig zag
2 Cu. Ft. W.C. Twin Shell, mig. P.K. SS constr., W/Pin int. bar

# **FILTERS**

Pressure Leaf

1-562 Sq. Ft., 316ELC, Hercules, 28 leaves 1-512 Sq. Ft., 316SS, Niagara, 21 leaves 1-400 Sq. Ft. R/L Sparkler 1-327 Sq. Ft., 304SS, Ind. Filter, 11 leaves 1-320 Sq. Ft. Durco 316 SS, 11 Leaves 1-259 Sq. Ft. Pronto Mdl. #3259, 75 psig 1-200 Sq. Ft., SS, Hercules, Horiz.

l - 157.64 sq. Ft. Sparkler model 55-5-28, 1-150 Sq. Ft. Horiz., 12 Vert. Leaf 3165S 1-135 Sq. Ft. Ni, Bowser, Vert. 1-35 Sq. Ft. Hercules Model 5, 316 SS,

horiz, tank vert leaves 50 psi 1-Sparkler Mdi.#18 D 12, SS const. 1-Sparkler Mdi.#18 D 4, constr. 1-Sparkler Mdl.#338 28, constr.

### **Rotary Vacuum**

1-56.6 Sq. Ft. KS, Inconel 600 1–56.5 Sq. Ft. K-S, 316SS, flexibelt disch. 1-87.92 Sq. Ft. Feinc, SS wetted parts, spring disch., 56" dia. x 6' face drum 1-132 Sq. Ft. Dorr Oliver, 3048S, maxibelt

1-200 Sq. Ft. Elmco, 316SS, 8'x8' 4-250 Sq. Ft. D.O. 316L SS Precoat, 8" x10', eanit

1-250 Sq. Ft. K-S 31688, coll disch. 1-300 Sq. Ft. Elmco, 316SS wetted parts, precoat type w/knife disch., 10" dia. x 10' drum, compit. w/control panel &

aux. equipment 1–314 Sq. Ft. Elmco, precoat disch., 316SS 1-400 Sq. Ft. Elmco, CS, Precoat 1-500 Sq. Ft. Elmco, 316SS, belt disch. 1-3'x1' 31655, knife disch. 1-3'x1' Dorr Oliver, FRP w/receiver & Nash

H4 vac. pump, 10 HP 1-3'x 1' K-8 comp. sys., 316 SS Flex-belt

### LIQUIDATION OF 160MM #/YR. SODIUM TRIPOLYPHOSPHATE PLANT-KEARNY, NEW JERSEY

-8' dia. x 50' Bartlett Snow Rotary Dryer, \$8, 100 HP.

1~8' dia. x 50' Louisville Steamtube Rotary Dryer, SS clad, 40 HP. 1-11'6" x 70' lg. Bartlett Snow Calciner, 3168S, 1100°C., com-

1-11'6" dia. C.E. Raymond Separator, single whizzer, CS constr. 1-24,000 Gal. Mix Tank, SS constr.,

16' dia. x 16', 20 HP. 1-20,000 Gal. Storage Tank, 88 constr., 16" dia. x 14'. 2-10,000 Gal. Storage Tank w/jckt., SS constr., atmos. int., 150 1-10,000 Gal. Mix Tank, SS constr.,

13' dla. x 10', 30HP. 1-10,000 Gai. Mix Tank w/int. colls, 13' dia. x 10', 30 HP.

L. x 9'H. 1-1130 sq. ft. Micro-Pul Reverse Jet Dust Collector, CS constr. \*Large Quantity Silos. Many Screw Conveyors Available-various

BUY DIRECT FROM PLANT SITE AND SAVE!!! CALL FOR COMPLETE DETAILS.

MANY MORE ITEMS IN STOCK-CALL IDM TODAY!

sizes, CS & SS construction.

PLUS LOTS - LOTS MORE

### GOOD, USED, CHEMICAL PHARMACEUTICAL & RELATE EQUIPMENT - CENTRIFUGES DRYERS, FILTERS, REACTORS TANKS ÉTC. WE WILL PURCHASE INDIVIDU

AL ITEMS OR COMPLET

CALL OUR OFFICE TODAY, TO DOLLARS PAID. NO DEAL TOO **BIG OR TOO SMALL.** 

**EQUIPMENT WANTED** 

GLASS...GLASS...GLASS WE ARE GLASS SPECIALISTS WITH A TREMENDOUS INVENTORY FEA. TURING UNUSED, USED AND REG. LASSED ITEMS. OUR SHOP PER. SONNEL ARE FULLY TRAINED TO HANDLE GLASS.

### REACTORS

Glass Lined 4,000 Gal. Pfaudler, 100/90 psl, TW 4,000 gal Pfaudler, 50/30 psl 3,700 gal Glascote, 50 å FV/90 psl 3,000 gal Glascote, 50 å FV/90 psl 3000 gai Pfaudier, 75/90 pei 2,000 gai Pfaudier, 75/90 pei 1,000 Gai. Pfaudier, 100&FV/90 pei,

4RW
1,000 Gal. Pfaudier, RA60 Series, 1002
FV/90 psi, 4DW
1,000 Gal. Pfaudier, RA60 Series, 1002
FV/90 psi, 4TW
800 Gal. SS clad, 60/60 psi
750 gal. DeDietrick, Phila drive

500 Gal. Pfaudier, 100&FV/85 psl, 8h

Staintess Steel
4,000 Gai. 318SS, Atmos./50 pai, withcolls
3,000 Gai. 347SS Blaw Knox, 150/50 pai
2,500 Gai. 316L SS, 75/75 pai, 150 pai int. cols
2000 Gai. Nooter Autoclave, 316L 2000
pai, FV int. colls
2,000 Gai. Dusenberg, 316 SS,15/35 &
FV int., 50 pai jkt.
1,750 Gai. 304SS, 10 HP Lightnin
1,500 Gai. 304SS, 10 HP Lightnin
1,500 Gai. 304SS, 100/30 pai
1,000 Gai. 304SS, 50/75 pai jkt
1,000 Gai. 316 SS, 15 & FV/50, 10 HP
1,000 Gai. 316 SS, 15 & FV/50, 10 HP 1,000 Gal. 316 SS, 13 a FV 30, 10 1,000 Gal. 316 SS, 100/30 10 HP 750 Gal. 316SS, 75 & FV/50 pel 750 Gal. 304SS, 50/60 pal 600 Gal. 316SS, 3000psl, 10 HP 600 Gal. SS, 50 psl, 1.5 HP XP 500 Gal. 316SS, 55 & FV/55 psl

450 SS, 50/75 psl 100 Gai. 316SS, 15/50 psl 100 Gai. 316ELC SS, 500/90 psi

\*\*\* SPECIAL OFFER \*\*\* 4-DRAIS SAND MILLS, TYPE PM-80 STS-DDA, MANUFACTURED 1984-65

### MIXERS

4.5 Gal. Kneader Master Cont., SS w/kt. 5 Gal. AMK 304SS Joktd. Kneader Extruder 15 Gal. W.C. Readco Sigma Blade Dbl. am 25 gal. Readco DBL/Arm Sigma Blade jktd. 8 construction 15 H.P. 80 Gal. Hockmeyer Pony, 88 contacts, 7.5 H

varispeed 100 Gal., SS, Sigma Blade, Jcktd. 40 HP 200 gal. W-P CS dble arm Sigma blade, 20 H9 500 liter Welex hi intensity, SS contact parts 500 Gal. S-W Rubber Cement, CS, 2-10 HF

500 Gal. S-W Rubber Cement, GS, motors (2)
Unused 1000 Gal. Sanitary 316SS B-K DW. Molion
Change Can; 100&FV/165 PSI, 125HP
Littleford Model FKM-600D, SS
Littleford Model FKM-800S, SS
Littleford Model FKM-800S, SS
Littleford Model FKM-2000, SS, w/choppers
7 Cu. Ft. 3049S Nauta Model MBX-70
10.6 Cu. Ft. Nauta D-105, CS
Welding Eng. Model 2FV1V2S Twin acres
Extruder, SS, Contacts, 150 psi
Koehring mdi. 350, 40 HP
NEW AUSUNE 118FD 75/37,6 HP Hockmeyer NEW/NEVER USED 75/37.6 HP

LICENSED ASBESTOS REMOVAL (201)390-9550 TELEX:642-863

# **EQUIPMENT COMPANY**

DIVISION ARECO, INCORPORATED 735 EAST GREEN STREET P.O. BOX 80

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LIQUIDATION SALE

# LARGE POLYSTYRENE PLANT

**ILLINOIS LOCATION** 

hist-Plauder Reactor, 1,500 gal., 316L SS dimple jkl. hist-Plauder Reactor, 10,000 gal. 316L SS clad, 60

19.(4) 1984-Plauder Reactor, 15,000 gai, 316L SS dimple ji (j) jijij-Metal Arts Corp. vessel, 17,000 gal. vert. 317L

8.(2) 1864-Brighton Corp. Tank, 12,000 gat. vert., solid 186.88.(2) htts-Bas, 176 cu. ft., S/S, cone bottom flet top. (4) hMi-line, 450 cu. ft., C/S, epoxy lined. (8) 104-line, 450 cu. ft., C/S, epoxy lined. (6)

1968-863, 500 cu. ft., C/S, epoxy lined, flat top, confcalbazom. (4) ithil-Worthington cent. pump, C/S, 15 HP, 200 GPM at

4 April (2) | Wil-Union Pump-inline, C/S, mod. 4x8x8.5 VCK, 40

IP.(4) IMM-Edw Renneburg Rot. Dryer, S/S, sleam heat, 10 IN-Haiters, C/S steem, type BNF 2420 (8) Wit-Flotrenics bin vent, filters, 122 sq. ft., 12 bags. INN-Katron Feeder twin screw, 8/S mod.5400-150 (4)

18M-Spatter fifter, 352 eq. ft. C/S, mod. VR-32-32.
18M-Screw conveyor, 304 SS, 7" dia. x 11L, 1.5 HP.
18M-Strong Scott Rib Blender, 25 cu. ft., 5 HP. (3)
180-Welex extruder 6", 30:1 L/D, 400 HP.
180-Welex extruder 8", 30:1 L/D, 600 HP. 188-Constr pelletizer, S/S, mod. 1024, 40 HP. (2) 1474-Water bath, 9/9, portable. (4) 14W-Ross Static Mixer, 30495, 3"x6 element. (4)

180-Hodem Welding Tank, 4800 gal. hortz. rubbo

#### - Annual Blower, C/S, 40 HP. (4) HB-Surral Blower, C/S, 10 HP. (3) HB-Surral Blower, Size 30, C/S, 10 HP. (3) HB-Surral Blower, Size 30, C/S, 10 HP. (4) HB-Surral Blower, C/S, 40 HP. (4) HB-Surral Blower, 1922-Bullalo blower, type 40-3CB, 40 HP. (4) 1914-Bullalo blower, mod. 45-3CB, 75 HP. (3)



개원 Bird Centrifuge, 32x50, 80:1 g

1163-Emireneering scrubber, mod. A33-14000 1163-Tank, 550 gal. vert. coal tar epoxy lined. 1161-Tank, 54000 gal. vert. C/8 epoxy coated fiet

Inplot.
Itist-Tenk, 50,000 gal. vert. C/8 epoxy, flat bot. conl-

pl. (3) (101-Serson sifter 60", mod. L880S88, 2.5 HP. 1102-Keen sifter 60", mod. K601S8, S/S, 1HP. 1104-Februaries Cyclone mod. FTHEC370-T, 304 S/S

BOTTLING PLANT

### FILTER PRESSES

19846 Shriver P&F filter press, 12"x12" alum, plates, closed delivery, 23 chembe 20534-Sporry Filter Press, 30", alumn 20539 Sparry Inter press 30", 35 Aluminum plates, 357 sq. 15370-Shriver 32" x 32", polypropylene, 27 plates, retchet

closing. 15029-Shriver ALP, plate & frame, 18 36" x 36", S/S recossed plates.
19799-Clow/Bethlehem filter press, 36", recess plates. 2

chambers 20076-Sporry litter press, 36", cast iron plates, closed dell-19462-independent filter press, 42" x 42", polypropylene 4 eye closed, 34 chambers. 20550-Sperry filter press, 42" Ehcl closer, 41 alum. plates

### **CANADIAN BUYERS** LIQUIDATION-QUEBEC

22373-Reactor, 3500 gal. 8'x9'H, S/S clad, agit, dimple

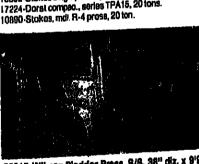
330 lb., [kt 75 lb., agit 30 HP, vari speed. (2) 22379-Philadelphia, 7V63 agit drives, 10 HP, S/S (4) 22386-Siebtechnik H-400 centrifuge conturbex horz. screen, S/S, 20 HP, 22365-Climatrol water chiller LFV151172, 40 tons.

22385-Cyclone Sepeartor, 40" dia. x2" plus 6" cone, S/S, Joy fan 15 HP. 22375-Sweco 30", 3 deck, S/S, ½ HP (2) 22387-Waukesha mod. 300, Sanl pump, 6"x6", 15 HP.

# FILTER-ROTARY VAC.

15828-FE,inc. 36" dia.x12", S/S, string disc., 1/2 HP. 17477-FE, inc., 3" dia.x 5", T316SS, belt disc., vac pump. 11177-Dorr Ofiver S/S, 5' dia. x 6'L 11653-Ofiver T-316SS, precoat 5'3"x8'. 19431-K.S. flexibelt, 6' dla. x 6' face, 3165S. 18392-Eimco belt filter, 8'x10', steeldrum, w/Nash pumps. 15827-Ametek, 8' dia.x14'0" face, maxi-bett, S/S. 17936-Eimco, 316SS, 10' dia. x 14', knife discharge. 17283-impcobalt filter, 12' dia. x 12',304SS, Nash vacuu 20251-K.S. T304, vacuum filter, 12' dia x 14', 3049S. 20323-Dorr Oliver 11'6"x16' face, S/S cont. parts.

PRESSES UNUSED Manusty Express, 10 ton, 20 stations. 11602-Colton Press mod.260, 31 de stations, 1800 TAB. 21382-FJ Stokes rotery tablet, 16 station, 10 ton. 21418-Maneaty rotary lablet, 18 station, 10 ton. 14425-Stokes Tab Press mod.#551, 61 station, 4 ton. 21417-FJ Stokes rotary, 27 station, 4 ton, double sided. 503881-Komorak Groavos, mdl. 75MSS briquetting press 20 S" dia. x 4.5" leco. 13392-Fitzpatrick Chilsonator, 50 HP, mdl. HA-50-30-210. 18802-Slokes single puchi press, 900-530-1 (T4), 12 ton. 17224-Dorat compag., series TPA15, 20 tons. 10890-Stokes, mdl. R-4 press, 20 ton.



22215-Wilmes Bladder Press, 8/8, 38" diz. x 9'9" long, horiz, 5 HP, unitized, (2)

# **DUST COLLECTORS** 21125-Fabri-Liet kd.SQ9-48 bin vent, 42 sq. ft. 16398-Mikro dust collector, 8/S, 63 sq. ft., mdl. 9-8-100,

21153-EVO, bin vent, 72 sq. ft., 8/8, 5 HP 20253-Unused EVO pulse jet collector, mdl. 84BF009C, 90

99BF030C, 350 sq. ft. 20255-Unused EVO Corp. dust collector; shaket type, mdl. M8049C10, 578 sq. ft.

# SCREENS

21203-Sprout Weldron etfet, D10, 6 decks. 21150-Sprout Weldron, D10, 118, 10 decks, S/S cont. 21187-Sprout Weldron, D10, 218, 10 decks, S/S cont.

### **NEW SANITARY RIBBON MIXERS**

Quoted as standards, available with ASME code

dimpleJackets Quick shipment on: 14, 24, 36, 55, 80, 100, and 150 cu. ft. mixers, Call Stave; (312) 350-2200

### **UNUSED CENTRIFUGES** 21593-Sharples P5400 Sanitary Contrifuges w/200 HP motor, 25 HP backdrive, gearbox, 5" pitch conveyor, CIP,

control panel (2) LATE MODEL

CENTRIFUGES

22314-Sharples #16 Super Centrifuge S/S, 3 HP, cooling coils clarifier (22) 20827-Bird, 18" x24" steel, conical bowl 20826-Bird, 24"x38" steel, con. bowl, gearbox. 20819-Bird, 24"x38", S/S, 15 degree, contour bowl. 20884-Bird 24":x60", H series, steel w/motor. 20384-Bird 32"x 50", SS T316 contour, 75HP. 12883-Bird 36":x98" contour, 10 deg. T317 ELC. 20137-Alfa Lavel, NX 418-B31-80, 316SS, gearbox 17308-Darr Oliver, 3045S, Merco mdl. 16L., 30 HP. 13565-Sharples, mdl. P 600, gearbox, motor. 19767-Unused Sharples, 2000, S/S, carbide. 20407-Sharples P2000 316SS, 20 HP drive motor.

21359-Sharples P3000 w/gearbox 0686-Sharples P3000, 52:1 gearbox, S/S casting.

# 21725-Sharpies, P3400, S/S, gearbox & motor, 19249-Sharpies, P5400, 316/3178S, 200 HP, gearbox

centrifuge.

CENT-BASKET VERT 21408-Delavel 22"x16" perf, basket hyd. drive. 15815-Delaval Mark III, perf. basket, 40"x24", 316SS, 30 HP, hydr., drive. 19446-Sharples Studge-Pak, SP-5500, 40"x24" basket

# **ROTARY VAC DRYER**



22210-Bertrams, S/S 6'dia. x 12' dished heads, half pipe coll jacket 200 psl, 20/13 HP, unitized.

### FILTER PRESSES 19846-Shriver PSF fitter press, 12"x12" alum. plates

closed delivery, 23 chart 20634-Sperry Filter Press, 30", alumn. 20639-Sperry filter press 30", 35 Aluminum plates, 357 sq. 15370-Shriver 32" x 32", polypropylene, 27 plates, ratchet

20076-Sperryfiller press, 36", cast iron plates, closed deliv. 19462-Independent filter press, 42" x 42", polypropylene 4 eye closed, 34 chambers. 1550-Sperry filter press, 42" Ehcl closer, 41 alum. plates.

closing. 15929-Shriver ALP, plate & frame, 16 36" x 36", S/S re-

TANKS-S/S 22257-UNUSED Tank, 100 gal., T30499, 30" dia., 0H 22253-UNUSED Tank, 550 gal., T30499, 4" OD, 0H 22256-UNUSED Tank, 1200 gal., T30499, 6" dia.7"H, 0H. 22256-UNUSED Tank, 1200 gal., T30499, 6" dia.7"H, 0H. 22265-UNUSED Tank, 1800 gal., 6' dia.x6', fal top & bot. 21283-Tank, 8/S vert., 1200 gal., 73048S, 6'x6'' dia.x7'3'' 22255-UNUSED Tank, 1800 gal., T304SS, vac., 5' dia.

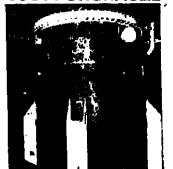
x21 H, con. 20851-Tank, SS, 9000 gal., agk., 12' dia. x 14'6" H. 20855-Tank, SS, 12000 gal., 12' dia. x 14', flat bottom, open top. 17043-Jos Qat horz, tank, 30488, 16,000 gal., 12'6" die. x

REACTORS

REACTORS

20252-Unised Risector, 800 gal., 30488 dimple jktd.
10138-Plaudier, 800 gal., T-316 L.SS, 56 PSI IN/150 PSI.
10138-Plaudier, 800 gal., 316 kl.SS, 56 PSI IN/150 PSI.
20928-Brighton, 4000 gal., 316 8/8, 3° da. x 7°8° st. side.
15475-Brighton, 4000 gal., 316 8/8, 3° da. x 7°8° st. side.
15475-Brighton, 4000 gal., 316 8/8, pipe coll kt.
20923-Richard Eng. Basetor, 4800 gal., T316 stain/clad.
Prisudier 10,000 gal. reactor T316L, 100 psi Inl., 190 psi.
Plaudier 15,000 gal. reactor T316L, 100 psi Inl., 200 psi jkt.

## JUST PURCHASED



22489-Walter 750 gal. Reactor, 5' dia, dished heads, T 304 SS.

22541-Tanks, S/S, 5'x6' (2) 22542-Cowles despenser, 100 HP. 22544-Mikro 2DH pulverizer 22548-P/S belt dryer, 4'x10'. 22549-Day, 85 cu. ft. ribbon blender, S/S. 22550-Ribbon blender, S/S. 40 cu. ft 22549-Day, B5 cu. ft. ribbon blender, S/S.
22550-Ribbon blender, S/S. 40 cu. ft.
22551-Kettles, 8"x10", S/S dimple jkt. (2)
22553-Quincy Air Compressor
22557-Raymond #50 Imp mill.
22552-Raymond 1A Hammermill.
22545-Ceddington bag packers (3)
22447-Dyna Mill mod. KD200, hortz. (2)
22448-Pfaudier 30 gal. G/L reactor (2)
22351-Atlas Copco air compressor, 600 CFM @ 125 psi, 125 HP. (5)
22441-Pappermeler 600 gal. Liter Mixer/Coffor 22460-P.K. twin shell blender, 1 cu. ft. 325 lbs/cu. ft. L/S stainless, w/drives 5 HP bar, ¼ HP main.
22461-P.K. 1 cu. ft., S/S, 275 ib. density, 30 ib. jkt., vac., ¼ HP vari speed main, 2 HP bar.
22344-Christian ribbon mixer, 36 cu. ft. steol jacket, 7 5 HP, unlitzed.

7 5 HP, unitized. 22342-Sheet extrusion line, Prodex 4.5", 24:1 L/D, 50 HP, stheet die, chili roll stack, Famco shear. 22343-NRM Terret Winder, 48-46 w/2 adjusto speed motors, 1 HP 22449-Gernco 10 cu. ft. 5/S, jkt. L/S processor 22498 Acrison mod. 203-1052, 1½", 2½", 4" auger

22498 Acrison mod. 203-1052, 192, 242, 4 abget w/drives. (3)
22497-Sparkler mod. 18S11, T304 S/S
22489-Walter 750 gal. reactor, FV/100 lb., jkt. 40 lb., 30 HP varidual motion.
22487-Walter 225 gal. reactor, FV/100 lb., jkt. 40 lb., 10 HP varidual motion.
22453-Stokes mod. 280 F, 100 ton press

22435-Miell Mixer, 250 G. Sigma, S/S, jkt., vac, 100 HP

MIXERS - PLOW 503755-Littleford, FKM 600D, SS jacketed, 25 HP. 20754-Littleford, FKM 3000D 65 CF, S/S, full jacket. 9214-New Plow Mixer, 80 cu. ft. 347SS, Jacket, 100HP. 20829-Littleford FKM 4200D, S/S, B7 cu. ft. JKT.

MIXER RIBBON 21120-Ribbon Blender, S/S, 10 cu. ft., jkt. SS, 150 psi. 20278-Read ribbon blender, 14.7 cu. ft. 304SS, 3 HP. 20616-Unused Day, 316SS, 23 cu. ft., 5HP. 20189-Robinson, 25 cu. ft., S/S, jacket, 10 HP. 22344-Christian Ribbon Blender, 30 cu. ft., C/S dbl spiral Ribbon Inner & Outer

20986-Int'l 34 cu. ft. S/S dbl. ribbon, 5 HP. (4) 20212-Haas ribbon, 36 cu. ft., S/S, 15 HP. 19265-Ribbon Mix 80 cu. ft. T304 SS, 5 HP (4) 19566-Howe, 115 cu. ft., sanitary S/S, double spirel ribbon. 20983-Strong Scott blender, 130 cu. ft., 30453, 25 XP geer

# 20614-Unused JH Day ribbon, S/S 270 cu. ft., 26 HP. 21114-JH Day ribbon blender, S/S dad, 75 HP, 480 cu.ft. MIXER/EXTRUDER

22352-Twin screw extruder (NA Bitruder Co), 85 mm, elect. heated, 20 HP DC, peliettole, vac pump used 100 hours 17654-AMK 26 gal. Mixturuder, Sigma, ST 7.5 HP. 18298-J.H. Day 26 gal. Dispersion, 25 HP vari main, 10 HF

20998-AMK 30 gal. 8/8, jkt. Sigma, 7.5 HP Main, 6 HP

2098-AMK 30 gal. 3/S, jkt. Sigma, 7.5 fer wall, 6 fer screw.
21334-Ross 40 gal., 3/8 hol oil jkl., Sigma 6 "disch. screw.
19828-AMK 50 gal. ST, jkt., Sigma, 10 "disch. screw.
17136-AMK 150 gal., ST Sigma, 10 "disch. screw.
14832-AMK 150 gal., ST Sigma, 11.5" screw.
14832-AMK 150 gal., SJS, Sigma 15HP main, 10HP screw.
19494-AMK 150 gal., SJS, Sigma, 15 HP/10 HP
503527-New Aaron 300 gal., T304SS, mk cautuder, Sigma, jkl., up to 200 HP main, 75 HP hyd. screw.
504528 - Aaron 300 gal. mbter/extruder T334SS, Sigma, 150 HP, screw. 75 HP hyd. jkl., 200 pal, Vac Cover.
Excellent condition. Cal Steve (312) 350-2200

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P.O. BOX 388 SOUTH RIVER N.J. 08882

ONA

(i) 1.4 eq. Ft. Luwa thin film SS (i) 2.5 Sq. Pt. Rodney Hunt Turbo Film 347 SS (i) 5.4 sq. Ft. Luma filmtruder, 316 LSS (i) 6.54 Sq. Ft. Votator Evaporator System, 316 SS contracts, 16 pat & FV & Int., 150 pat jkt. (i) 8.7 Sq. Ft. Rodney Hunt Turbo-Film, 304 SS contact paris, 15 par & FV/160 pat jckt. (i) 10.8 Sq. Pt. Luwa SS Wiped Film Evap. System, 15/550 pat 11.10.5 Sq. Ft. Votator Turba-Film, 304 Sanit. SS FV/160 pat 10.10

**BLENDERS** 

(1) GATX Fuller Air Compressor 80 (1) Corken Compressor 7.5 HP

h.p. (2) Hi Type ESV Compressors 30

RECENT PURCHASES

(1) Carrier 2'x46' Vibrating fluid dryer, 31853 (1) Podbielniek mdl. #9700-2 Cant. 280 P8i (1) 5,000 gel. CS. Vertical Sphere, Rated 1007 P8iC (2) 12%' dia.x307% Long Packed Col. 30458, 275 dealign pres. (1) 64 sq.ft. U-Tube Heat Exchanger, all 31658 75/450 pel (1) 85 sq.ft. Heat Exchanger, all 31658 75/450 pel (1) 86 sq.ft. Heat Exchanger, CS/38 75/450 pel (1) 680 sq.ft. Heat Exchanger, CS/38 75/5 pel (1) 680 sq.ft. Heat Exchanger, CS/38 75/150 P8i (1) 1006 sq.ft. Heat Exchanger, CS/85 75 P8i Shell (1) 1006 sq.ft. Heat Exchanger, CS/85 75 P8i Shell (1) 1006 sq.ft. Heat Exchanger, CS/85 75 P8i Shell (1) 1007 sq.ft. Reboiled CS/S8 75/150 P8i (2) F8i Paribanka Morse Gae Compressor 380 CFM 600 h.p.

1~191 Sq. Ft. Enzinger, SS, Vert., 75 psi

-Marley NC Tower, 88"W. x 14'6"

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#M1-Brd, 32x 50 centrifuge, 80:1 gearbox. (2)

APPLE JUICE PROCESSING AND MORT ITEMS NEW 1983 & USED LESS THAN SHOWN THE COMPLETE PLANT AS CRIGINALLY OPERATED, CALL NOW! jacket. 22381 - Reactor, 5000 gei. 10 x92"H, T316S cled, internal

11486 Elmoo 10'x10'rotary vac. filler.

eq. ft.
21192-JH Day md. RJ-18RJ38, 125 eq. ft., CS, 3 HP.
21192-JH Day md. RJ-18RJ38, 125 eq. ft., CS, 3 HP.
21292-Fabri-Jet, md. SQ16-80, 151 eq. ft.
20398-Pulse jet collector, "Flexiklean," mdl. 58CT24 AV ft.
w/175 eq. ft., Gloth, C.S.
21286-Mikro dust collector, 285 eq. ft., S/S.
20258-Unused EVO Corp. pulse jet dust collector, mdl.

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22'8'A" long, 10 PSI.

MIXER - DBL. ARM 22448-B.P. 100 gal Sigma, S/S, till. 22439-B.P. 100 gal. Sigma, S/S 22440-B.P. 200 gal. Sigma, bit.

motor. 21124-Ribbon Blender, 3048S #kt., 160 cu. ft., 50 HP.

21350-8.P. 500 gal. Sigma ateel, jkt. 125 psi,150 HP, Hyd. tilt

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VARIOUS SIZES & MATERIALS OF CONSTRUCTION fil.Ters FILTER PRESSES: ERTEL PRESSURE LEAF (6) STAR 18" DIA., 19 & 21 CHAMBERS, SS

SPEERY 56", 28 & 35 CHAMBERS (4) VACUUM BELT EXTRACTORS: 2 EIMCO 2'x12', 316SS VAC. BELT FILTER SYSTEMS 40 FILTER PRESSES 42" 43" 48" 56" POLY PRO, R/L CAST IRON 4 PASSAVANT MDL. 200 VAC-U-PRESS BELT FILTERS, 250 SQ. FT. FILTER AREA

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Reactor systems **GLASS LINED:** (1) 3,000, (7) 2,000, (22) 1,000, (8) 500, (2) 300 (1) 200, (1) 130, (4) 100, (4) 50, (1) 30, GALLON

all reactors equipped with tw drives, mechanical seals many with VARIABLE SPEED DRIVES, GLASS, RECEIVERS & GRAPHITE HEAT EXCHANGER STAINLESS STEEL: 316 & 316 ELC: (1) 4,000, (1) 3,000, (3) 2200, (6) 2,000, (1) 1,300, (2) 1,250, (9) 1,100, (6) 1,000, (7) 500, (2) 300, (1) 30, (1) 10 GALLON

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900 GAL. 304 SS READCO MIXER SIGMA SHARPLES 316SS MODEL P-3400 CENTRIFUGE (3) UNUSED 1900 SQ. FT. HAST, C EXCHANGER

2-POWDERED COATING PLANTS COMPLETE LINES: Fine grinding, drying, compounding, packaging, molding 1980's Equipment installed and can be operated in place.

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REACTORS: 3,000 GAL. 316 SS 60/30 HP AGIT. 100 PSI INT. W/COILS (4) 3,000 GAL. SS 30 HP, 6TW, 300 PSI INT. W/COILS 2,000 GAL. 316 L SS, 75/200 PSI JKT (2)

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22 INIOUSSTRIAN, SINTESS, AND VALUE AS INCIDEN Plants manufactured Carbon Electrodes Until Sept. '86

Niagara Falis/New York Area 700,000 Sq. Ft. Buildings...50 acres of land 750,000 Sq. Ft. Buildings...35 acres of land Model 5057 Raymond Roller Mills, 40 High-Intensity mixers, Electrical sub stations and switch gear, Dust Collectors, Material Handling Systems, Carbon Extruders, 84" Lathe, 14000 Ton Hydraulic, press, Complete Autoclave System.

\*250MM CFPD SYNTERETHC: GASSELANT\* NEW 1976... COMPRISED OF TWO TRAINS... 60 ACRES OF LAND AIR COMPRESSORS: 5,015 CFM @ 300 RPM, 250 HP (4)

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48" X 30" PERFORATE, S.S. 316
BOTTOM DUMP, HYDRAULIC, 50 HP -90"x18" Sharples, Solid, 8.S. 316, 25HP -Podbielnisk #5500, PUP, S.S. 316, 2HP Ved XP

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It P.K. Conicsi Vaccium Stainless
09-6-54\*a. ft. Rodnoy Hunt, S.S. 316, Hot Oil Jkt.
ER-338\*ag.ft. 304 S.S., 150 PSI UNUSED (4)
ER-238\*ag.ft. 304 S.S., 175 PSI UNUSED
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0R-Right 6", S.S. 304 SUD Vacci Rietz 6", S.S. 304, 5HP Van XP S-24" Coʻumbia S.S. 18 Chmbr, Hydr. (2) gal, Stainless Jackeled trick Model D.6 S.S. 5 HP impaon 2, Style UD, 72" dia., S.S. impaon 1F, Style UD, 50" dia., S.S. Stutt, P.K., Y-type, S.S. Jkt. Vac. 550 # 4-10cu It. P.K. V-type, S.S. Jkt. Vac. 550 # 3 gal. Pfauller Glasst lined TW Drive 3 gal. Pfauller, S.S. 316, 60/90 PSI, TW Drive 1 gal. Hopponiat 2016, 100 PSI, TW Drive Riggi-Honzonial, 304 Stainless Saddles cal. Vertical, 304 Stainless Saddles cal. Vertical, 304 St. S. 25 PSI, UNUSED (2), Vertical, 304 S. 25 PSI, UNUSED (2), Vertical, 304 S. S. 25 PSI UNUSED (2) val. Plauder Glass-Lined Vertical Plauder Glass-Lined Jacketed P-150 CFM (2) Vertical

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Abbe 41/2x13' Continuous Steel Ball Mill, 60 HP.
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29MS8-7

38M8-4I

38M3-2

18P452

38M2

29M3

STS-100 Aeromatic SS Fluid Bed Dryor 5000 gal. FRP vert. tanks, 7'8"x 15' (2) UNUSED 750 gal., 316SS recievers, 50 psi & FV 300, 100 gal. G/L reactors 25/90 psi, mech Unused 70 cu. ft. Titanium dbie cone vac Drye

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SS Ht. Exch.: 1187, 246, 200, 147, 125, 70 sq. ft

10 gal., 7 gal., B-P Dispersion jktd., vac., 20 Hr

SS Littleford mixers w/choppers FKM 2000 D, 1200 D, 600 D, 300 D (5)

**FILTERS** 

48" poly chambers, 11/2" cake, 4 eye (150)

CENTRIFUGES

48"x30", 40"x24", 316 SS auto-batch

40", 30", 26", basket, SS & R/L avail.

40"x60", 24"x60", 18"x28", 6" Bird

DeLevel: NX 207, BRPX 207

Fitzmilis: F20, F8, D6 (8)

P5000, P3400, P3000, P2000, Sharples

Westphalia: SAMN 5036, SA 1435-076

HS36, HS24, S8, 316 SS B-P "Ter Meer"

Chilsonators: all 98, 7LX 10D, BLX16D

Mikro: 4TH, 3TH, 2DH, 2SOB, 1SH, 8MA

3-Roll Mills: 16"x40" to 4"x8" (9)

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Colloid: 50, 25, 15, 10, 5, 1HP

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42" Shriver poly, 50 ch., 4 eye

2½ gal. Day SS Sigma jktd., vac., 10 HP

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CALL JACK BURCH

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50 gal. SS jktd. Sigma, 15 HP Sigma Mixers: 300 gal. 50 HP, 700 gal. 400 HP, 200 gal. 50 HP, 100 gal. 30 HP 2 cu. ft. PK SS Twin Shell w/bar 23 cu. ft. SS Day double ribbon, 71/2 HP 18" x28" 316 SS Bird Solid Powl Centrif. 3TH Mikro Pulverizer 30 HP

1611

1966

2223

2403

2490

2575

3221

2B 2M9

2M-7

3M6 2M7

1M8

REACTORS 2000, 1000, 750, 300, 100 gal. G/L, mech. seals (7)

3000 gal. 316 SS 100/150 psi vari, agit. SS filter presses: 18",16", 13",12"(7) 3000 gal,304 SS, 25/125 psi, 1/2pipe coli jktd., Sparklers: 3359, 18010,8-6 agit New 1974 2000 gal. 316 89, 75/180 psl, agit. 1000 gai, 316 SS, 75 & FV/150 psi, agit. 500 gal., 316 SS, 75 & FV/70 pal, agit 24 more in stock from 10 to 300 gals., 304 &

316 88. Call Now SS BLENDERS

89 cu. it. 85 Patt. cone, w/liquid bar Ribbon/Paddle: 850, 200, 120, 70, 40, 23 cu.

ft. (26) Conical: 320, 200, 150, 130, 100, 88, 69, 40, 30, 20, 10, 5, 2 cu. ft. (16) Twin Shell: 200, 100, 75, 20, 3 cu. ft. some

MIXERS

Double Arm: 1000, 500, 300, 200, 150, 10, 7, 2½, gal. Sigma, iktd. Pony: 125, 75, 100, 80, 60, 50 gal. (12) Planetary: 100, 85, gal. vacuum Dispersers: 75, 40, 25, 20 15 HP (8) Littleford: FKM 2000D, 1200D, 600D, 300D,

MISCELLANEOUS

Vac. Pumps: NASH: CL 2003, CL 703, AT Tablet Presses: STOKES, MANESTY, Flakers: 8'x5', 3'x6'6", drum COLTON, All Sizes

Wiped film: 173, 87, 25, 21.6, 12 sq. ft. Belt Flakers: 48"x45', 20"x20' , Vac.: 500, 100, 50, 40, 10, 2.5 c.f. Rotary Vac.: 130, 40, 20, 10 cu. ft. 2004, L5, MD 674 KINNEY: KDH 150, KD S.S. Fluid Bed: 100 kg, 60 kg, 30 kg, S.S.

Rotary: 8'x70' to 2'x14' (12)

George Equipment & Machinery Co. 135 Manchester Place, Newark, N.J. 07104 Tel. (201) 481-0900 Telex No. 138944

December 22, 1986

CHEMICAL MARKETING REPORTER

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....December 22, 1986



### KETTLES-REACTORS, SS

30,000 gal. 30488 fermentors, 14' x 24', 25 psl/vac., coils, 200 HP agit. (4)
5,000 gal. 30488, atm. int., 75 psl jkt., agit.
4,100 gal. 30488 kettle, 16 psl jkt., 5 HP agit.
3,600 gal. 30488 reactor, 75 psl/FV int., 180 psl jkt.
1,500 gal. 30488 reactor, 75 psl/FV int., 180 psl jkt.
1,500 gal. 30488 kettles, jktd., 5 HP agit. (3)
1,500 gal. Plaudier 316 S3 reactor, FV/180 psl, 5 HP Agit. (2)
1,150 gal. 30488 reactor, 15 psl int., 25 psl jkt., 5 HP agit.
900 gal. 30488 reactor, 75 psl/FV int., 150 psl jkt., coils (3)
500 gal. 30488 reactor, 150 psl int., 75 psl jkt., 5 HP agit.
300 gal. 30488 reactor, 75 psl/FV int., 60 psl jkt.
(50)... 31688 reactor, 150 psl int., 60 psl jkt.
(60)... 31688 reactor, 201 for jkt. gallon to 400 gallon... call for list.

# BIG PFAUDLER 316SS REACTORS

12'6''x 15', 100 pal, 200 pal jkt. Agit. (4) 10,000 gal. Plaudler, 316SS, 11'6"x 12'4", 100 psl, 180 psl, jkt. Agit.

# REACTORS-GLASS

2 gal. Pfaudier, 750 pal/FV, 700 pal jkt.
20 gal. Pfaudier, 35 pal, 100 pal jkt.
20 gal. Pfaudier, 35 pal, 100 pal jkt., agit. (2)
30 gal. Pfaudier, 25 pal, 100 pal jkt., agit., 1975
50 gal. Pfaudier, 25 pal, 90 pal jkt., agit., 1975
100 gal. Pfaudier, 25 pal, 90 pal jkt., agit.
150 gal. Pfaudier, 25 pal/vac., 90 pal jkt., agit.
300 gal. Pfaudier, 100 pal/vac., 90 pal jkt., agit.
500 gal. Pfaudier, 100 pal/vac., 90 pal jkt., vari-drive agit.
500 gal. Pfaudier, 100 pal/vac., 105 pal jkt., 5 HP agit.
750 gal. Pfaudier, 100 pal, 90 pal jkt., 5 HP agit.
1,000 gal. Pfaudier, 75 pal/vac., 90 pal jkt., 10 HP agit.
1,500 gal. Pfaudier, 100 pal/vac., 90 pal jkt., 15 HP agit.
2,000 gal. Pfaudier, 100 pal/vac., 90 pal jkt., 15 HP agit.
2,600 gal. Pfaudier, 100 pal/vac., 90 pal jkt., 15 HP agit.
2,600 gal. Pfaudier, 100 pal/vac., 90 pal jkt., 15 HP agit.
2,600 gal. Pfaudier, 100 pal/vac., 90 pal jkt., 15 HP agit.
2,600 gal. Pfaudier, 150 pal, 90 pal jkt., 3TW6 agit.

LIQUIDATION! CHEMICAL/POLYMER PLANT....ILLINOIS

..BUY BEFORE REMOVAL AND SAVE!! Bird 32"x 50", centrifuges, 316SS, contour (2)

Welex 8" Extruder, 700 HP, 30:1 L/D (5) Welex 6" Extruder, 400 HP, 30:1 L/D (2) Conair 24" pelietizer, 40 HP (2) Renneberg 5'x 25' 304 SS rpt. hot dryers, 10 HP, (3)

Sweco & Kason 60" screens, SS (2) K-Tron 7000#/hr. twin screw volumetric

feeder, \$5, (5) Plaudier 1,500 gal. 316L SS reactor, FV/-180 pai' 5 HP agit. (2)

Plaudier 10,000 gal. 316L SS reactor, 150 psi/FV int., 180 pai jkt., hyd agit (4) Worth. Plant air comp., 323 CFM @ 125 psi, 75 HP, Model #4-BB-2 (2) 17,000 gal. & 12,000 gal. 316 SS Tanks (3)

PHONE (609) 267-1600

### **DRYERS** Nooler 4' x 14' rot. yac., 31688, 1982, NEW (3)

Blaw Knox 6'4"x 40" \$8 vac. dryer, 600 cu. ft. Blaw Knox 36"x 20' vac. dryer 316L 88, 72 cu. ft. Břaw Knex 66"x 36' vac. dryer, nickel Mathia 24"x48" flaker, chrome plated Sandylk 48"x24" SS belt fisker, UNUSED Sargent 60" x 45" SS conveyor dryer Blaw Knox 32" x 90" dbl. drum Aerometic #ST-5 fluid bed dryer, 5/10 KQ Witte 36" x 10' fluid bed, SS, sanit.-cooler Renneberg 36" x 20" rotary dryer, 316 SS 96" x 50" Louisville SS rotary dryer 10"x 100' GATX rot, steam tube dryers, 140 psi (4) Wysemont #VTL-24 Turbo-tray dryer, 30498 P-K 5 cu. ft. vac. dryer, 30488 P-K 20 cu. ft. vac. dryer. 304L SS (2) Abbe 30 cu. ft. 30499 vac. dryer Devine 110 cu. ft. 304 SS vac. dryer Plauder 165 cu. ft. glass-steel vac. dryers (2) Abbe 325 cu. ft. 31688 vac. dryer Devine 370 cu. ft. 316SS vac. dryer Devine 564 sq: ft. vac. shelf dryer Miro 30" SS spray dryer Bowen 72" spray dryer, SS Bowen 96" apray dryer, SS

# FILTERS-VACUUM

36" x 1' Dorr-Oliver, fiber glass 9 sq. ft. 36" x 1' Ametek, 316 SS, 9 sq. ft. 40" x 3' Bird-Young, SS, 48 sq. ft. 4" x 16' Eirnco, 316SS, 64 sq. ft., hortz. 6" x 3' Ametek, SS, 55 sq. ft. 6" x 3" Ameter, 35, 35 sq. Tt.
6" x 4" Elmco, "Elmcomet" polypropylene, LINUSED
8" x 6" Elmco, 35, 200 sq. ft., precost
8" x 10" Dorr-Cliver, 250 sq. ft., 31685, precost
8" x 12" Elmco, 31685, precost, 300 sq. ft., (3)
8" x 14" Dorr-Otiver, 31685, precost, 350 sq. ft. (2)
10" x 10" Elmco, 31685, precost, 314 sq. ft.
11" "x 16" Elmco, 31685, precost, 314 sq. ft. 12' x 14' Komline, 30488, 525 sq. ft., (lexibelt disch. (2)

## FILTERS-PRESSURE

64 sq. ft. Funds, SS, jktd.
65 sq. ft. Artisan "Dynamic" filter /weeher, SS (2)
140 sq. ft. Niegera # 36-140 316 SS (2)
310 sq. ft. Niegera # 310-22, 316SS, eanil.
1000 sq. ft. U.S. Autojet, 316SS, eanil.
1000 sq. ft. U.S. Autojet #1000, 304SS
36" Skriver filter press, 546 sq. ft., hydraulic
42" Shriver filter press, 777 sq. ft., hydraulic
48" Shriver ALP recessed filter press, 8, 276 sq. ft.
48" Poly Filter Co. polypropylene filter press, 2094 sq. ft.,
67 cu. ft. cake, 1963

# PULVERIZERS

Mikro #4TH pulv., 125 HP, UNUSED (15)
Mikro #5MA atomizer, 5 HP
Mikro #6MA atomizer, 8S
Palman #REFS pulv., 100 HP
Palman #PP6 pulv., 50/75 HP
Abbe porcelain pebble mills... 36"x42", 36"x48",
42"x80", 48"x60", 60"x48" (7)

Raymond #6058 H-side roller mills, dbl. whizzer (2)
Raymond #73612 HI-side roller mill, dbl. whizzer

### NEW LIQUIDATION... CHEMICAL PLANT...GARFIELD. N.J.

(4) 31888 packed columne; 18" x 15"; 20" x 12"; 36" x 23 ; 36" x 40" (1) 36" x 46' Giltch 316L 88 column, 24 trays

(1) 38" x 48" Gilitch 318L SS column, 24 trays
(1) 48" die, x 60" high 98 tray column
(1) 60" x 60" Giltch 304L 98 column, 60 trays, FV/76 psi
(1) 72" x 39" high 98 column, 11 tray
(1) 78" die, x 43" high Nooter 88 column, jacketed, 25 psi/FV 150 psi jkt., 20 trays
(5) Niagara Aero heat exchangers, 88 contacts
(21) Shell and tube heet exchangers, 310 98 and 304 98;
12, 41, 92, 213, 297, 300, 320, 393, 400 (2) 431, 450, 522, 524, 527, (4) 800, 1050, 1300 sq.tt.
(3) Niagara 88 leaf fifters; 75, 60 sq. ft.
(1) \$8ktro pulverizer #27th, 88
(3) Patterson 200 gal. 88 Sigma brade mixers, fxtd., vac. cover, bottom disch., 20 HP
(1) Porter 62 cut. R. 304 88 dbl. cone blender
(1) 8000 gal. 316L 85 tank, 9" x 16", horiz., coils
(1) 6000 gal. 318 S8 tank, 9" x 16", horiz., coils
(1) 6000 gal. 318 S8 tank, 9" x 16", horiz., egil.
(1) 1500 gal. 318 S8 tank / 8"il, 6" x 15", wy/colls

1) 1800 gal. 316L 66 tank/atill, 6' x 8', w/colls 1) 1500 gal. 316L 68 tank, 5'6' x 8', horiz., w/colls (8) 318 58 and 304 88 tanks: 1200, 1100, 500 (2), 250,

(8) 316 SS and 304 SS tanks: 1200, 1100, 500 [2], 200, 200, 160 gsl.
(6) 3000 gsl. vert. steel tanks, 8' x 9'
(1) industrial filter dual unit dionization system, #3583PSA, Type 268, W/(2) 315l. SS columns, 316 SS exchanger and tanks, controls, etc... bullt 197.
ALSO — SS pumps; (9) rubber-fined tanks on scales to 7500 gsl; Reloctione SS collector; blower; etc.



Over (50) Bird & Sharples decanters

### CENTRIFUGES

Sharples P-5400 D-Canter, 316SS, Carbide tiles, late (2) Sharples P-3400 D-canter, 316SS, tiles (2) Sharples P-5000 D-canter, 316SS Sharples P-560 D-canter, 316SS, back drive Bird 12" x 30", 316SS, Decanter, 20 HP Bird 16" x 26", 316SS, Decanter (3) Bird 24" x 38" Decenter, 30488, contour-10 Bird 24" x 38" Decenter, 31685, contour (3) Bird 24" x 60" Decenter, steel Bird 24" x 86" Decanter, SS, 125 HP Bird 24"x 96" decanter, 304SS, carbide tiles, 1981

Bird 32" x 50" Decenter, Monel, contour (2) Bird 32" x 50" Decenter, 30488, contour DeLaval NX214-31B Decanter, 30498, 20 HP (2) Sharples AS16V "Super," 6S (5)
Sharples AS26V "Super," 8S
DeLaval BRPX-213-30, 316SS separator/dealudgers (3)
Westfalls SAMN15037, Desludger/Separator, 316SS
Westfalls SA14-35-076 3-way separator, 316SS
Krupp 10" pusher, 316SS, 15 HP Beker-Perkins 19" pusher, 30458, 40 HP Bharples 27" D-Hydrator, 31658...spares (3) Sharples 48" T-1600 auto-basket, 100 HP Tolhurat 48" Betchmaster, rubber lined, 30 HP Sharples 48" Tornsdo-Matic, SS, 25 HP Delaval 48" Mark 111, 31658 hyd. CENTRIFUGE PARTS... Sharples, Bird, DeLaval, etc.

### EVAPORATORS

2.4 sq. ft. Rodney-Hunt SS, 3 HP
21 sq. ft. Rodney-Hunt Turbafilm #4, SS
87 sq. ft. Rodney-Hunt, 304 SS, Turbafilm
100 sq. ft. Pisudier, 316L SS, wiped film
600 sq. ft. Goslin-Birmingham dbl. effect, SS
854 sq. ft. Ruflovak dbl. effect, SS
1688 sq. ft. Roger dbl. effect, SS
Swenson 31698 cntinuous crystallizer, 9" x 14"

Tanks a vessels

30,000 gel., 304SS, 14' x 24', colis, 200 HP agit. (4) 20,000 gel., 304SS, 12' x 24' (2) 17,000 gel., 304SS, 11' x 24' (3 17,000 gel., 316LSS, 14'x 13', Agit. (2) 77,000 gal., 316LSS, 14'x 13', Agit. (2) 12,000 gal., 316LSS, 12'x 14', Agit. (5) 10,500 gal., 316LSS, 8'x 25' 10,400 gal., 304SS, 10'6" x 16', agit. 8,000 gal., 304SS, 10'6" x 12' 5,000 gal., 304SS, 8'x9', 25 HP agit. 3,500 gal., 304SS, 8'x9', 25 HP agit.

# MIXERS, BLENDERS

3.5 cu. ft. Henechel #FM15D, 17/20 KW
11.5 cu. ft. Henechel #FM15D, 92/46 HP
13.7 cu. ft. Lodige #W600/K1200, mix/cool comb.
20 cu. ft. P-K twin shell SS
33 cu. ft. Abbe high intensity, SS, 40/20 HP
35 cu. ft. Day Nauta, #NBX350, SS
43 cu. ft. Littleford #FKM2000E, SS, Choppers
52 cu. ft. Nauta 304SS mixer (2)
50 cu. ft. Rayron TW SH, Sanit SS

52 cu. ft. Nauta 304SS mixer (2)
60 cu. ft. Gerrec, TW SH, Sanit, SS
69 cu. ft. Patterson dbl. cone, SS
70 cu. ft. Day Nauta, #NB700, 10 HP
75 cu. ft. Day Nauta, SS, jktd.
75 cu. ft. Day Nauta, SS, jktd.
76 cu. ft. Day Nauta, SS, 1981
110 cu. ft. J.H. Day, dbl. ribbon, 316SS
120 cu. ft. Cleveland ribbon blenders (5)
144 cu. ft. 304SS dbl. ribbon blender, 30 HP
169 cu. ft. Pfaudler; dbl. cone, glass steel jktd., yacuum
200 cu. ft. Young, ribbon, SS

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BALERS, Dispozepak #D600 balers, (2) BAG PACKER, Howe-Richardson #G-S-17 semiautomatic bagging system SS contacts
BINS, 304L SS contacts, 1300 cu.tt./9720 gal CENTRIFUGE, Bird 24"x98", 30458, Model 15

solid bowl continuous, 10 deg. contour bowl Tungaten carbide tiles on conveyor, 150 HP CHLORINATION SYSTEM, Wallace & Tiernan COLUMN, 46" dia. x 15'9", 304SS

CYCLONE, DuCon Model 700/175 30488 No efficiency cyclones, size 210, Type VM (8) DRYERS. Nooter 4' x 14' rotary vac. dryer, 316L SS shell and jacket, incolor ribbon agk. ASME 100 pel/FV int. & jacket. 100 HP

DUST COLLECTORS, EVO reverse pulse, 100 320, 640 sq. ft. (4) FURNACE, C-E Air Co. "Cor-Pak" thermo on

dizers, direct gas fired MIXER, Air mix biender system, Koppere-Sprou Waldron #36-50, 500 cu.ft., 3048S MIXERS; Webb, 59" W x 15'L twin shaft peddle mixers or pug mills, 304SS contacts, (2)
PULVERIZERS, Mikro #4TH pulverizers, 126 HP drive, (15)

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(2) Munson 300 cu.ft. blenders, 104" dis. #TS-300GB, pkgd.

1) Munson 110 cu.ft. blender, 90" dis #700/110, pkgd. (2) Munson 90 cu.ft. blenders, 80" dis

#7TS90, pkgd. (2) 400 cu.ft. Gruendler ribbon blenders (2) 215 cu.ft. Cleveland ribbon blenders (2) Eirich 10' dia. intensive mix mullers,

motorized pen and mullers (2) Komline dbl. cone blenders; 320 cu.ft. (10' dia.), 69 cu.ft. (6' dia.) 3) Gruendler hammermille, 150 HP, 198

2) Gruendier hammermills, 100 HP, 60 HP ) Mikro #8D atomizer pulverizer, 30 HP Mikro #4TH pulverizer, 50 HP ?) Saw tooth brakers/crushers

(2) St. Regis baggers 1) "Push-Puil" ralicar unloading system (25) Flexkleen, Dustex, etc., bag type dust

(2) Box sifters

1) Handling system w/(2) 2000 lbs. eleve tors, 80' powered roller conveyor, etc. ALSO...laboratory with lab apparatus, to bles, equipment, etc.; motor contro center units; Gardner-Denver al compressor; etc., etc.



Poly Filter co. 48" polypropylene filter press, (100) chambers, 2094 sq. ft., 87 cu. ft. cake, hydraulic...1983, CALLI

JUST PURCHASED!...(9) Patterson & Abbe batch ball mills & pebble mili, varous sizes... CALLI

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Miny Ross 16 gal, 95 jktd mixtruder 7 V; HP mdl. AMK 15 Srong Scott 200 cu. ft. C/8 Ribbon Blender

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-Bidger Leaf Filter SS 360 sq. ft.
-thez 58 Rotary Filter 5 z 5
-find Filter 4"dis., 6S, jktd. w/20HP Drive
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-biddiffe Filter 900 sq. ft. Type 122 ID 21 MOL OMD
-Sinhe 58" ALP 318 SS, 41, 48 Cham (2)
-spatier Filter MOL #18 D-4 SS jkt/38 8-5
-spaty 42" Plypro Filter Press 48 Chambers
-siz 53 Filter Presses 18" (5)
-45 Artojet Filter 8S 50 & 750 sq. ft.

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- libe 20 cu. H. 88 Conical Vac. Dryer
- Januaric Fluid Bed Dryer Lab. MDL-15/100 ST
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- Januaric Fluid Bed Dryer SS Lab MDL #75
- Januaric Fluid Bed Dryer SS Lab MDL #75
- Januaric Fluid Bed Dryer SS 220 SS (2)
- Pribaron Kelley Twin Shell 18-3 cu. It. vac. processor I
- Public Robert Fluid Shell Vac. Dryer 75 cu. It.
- Public Robert Fluid Shell Vac. Dryer 75 cu. It.
- Public Robert SS 20 Conical Vac Dryer.
- Hauder Corical Vac. Dryer GJL 72 cu. It. compt. sys.
- Islandard Hersey 4"x30" Rotary Dryer SS
- Islandard Hersey 4"x30" Rotary Dryer SS
- Islandard Vac. Shell Dryers 48.9 sq. It. (7)
- Stong Scott Rotary Vac. Dryer SS 3"x 12" Solidaire

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Chromolox Hot Oil Heaters 20 & 40 KW & 80 K.W. complete system UNUSED

lateer Filler Model No. 33A Auger Type, 88/sanit lutoclave 200 gal. SS 115/350 Adicinate 200 gal. 33 11954 Artisen I sq. fl. wiped film avaporator 85 complete system Micro Atomizor S\$ 8HP XP Mdl. #5MA Ross 2 gal Planetery Mixer Model # 130 ELS/8 jkt bowl

### **PAINT PLANT LIQUIDATIONS**

-Abbe 12"x18" steel, ktd., lab ball mill
-Cowles Dissolver, 50/40/30/11/1/1 HP
-10HP, Dissolver, vari speed
-5HP, Dissolver, straight speed
-30HP, Hill Homo Mixer
-Kady Mill, 100 gai, as, jktd., 30HP
-Ross 3 Rolf Mill, ibd., 4/9" x 10", 4"x8"
-Reitz deintegrator 88 5HP
-Schold Shot Mill 304 88 jktd. 100HP (2)

### CENTRIFUGES

-Bird Centrifuge C/S 40"x50" Solid Bowi -Bird Centrifuge C/S 18"x28" Contour Bowl -Bird 36"x50" 34733 Contour Bowl -Sharples 12" 88 Lab Model/Brighton Lab -Sharples P-800/3000/5000 Decanter 85 -Sharples Centrifuge 12" 88 solid bowl w/skil -Tolhurst Centrifuge 28" 88 perf. basket

### **GRINDERS & MILLS**

-Alpine Sleve Model #A-32-100 LS
-Cumberland Grinder Size 14
-Entoleter Complact Mill, Type ElM, 86, 30HP
-Fitzmill Model #D-8/DSAO/12, 30 HP 88
-Greerco Colloid Mill, 3HP & 8HP
-Micro Pulverizer 4 TH (3)
-Patterson Ball Mill 3'x4' jkt.
-Rotex Screener 2'x4'/1'x3'
-Simpson Mueller 6"x5" size 2 VD mixer 20HP
-Sweco Separator 48"/30"/24"/18"9S

## REACTORS

-4000 gel.316 SS resctor 90/500 pel helf pipe jacket (4)
-Norwalk 3000 & 750 gel. SS reactor dimple jktd FV/50
-Plaudier 9200 gel G/L Reactor 90/90 pel Unused
-Downington 1500 gel. Monet Clad reactor 55/70 pel
-13,500 gel. 304 Etc Dim., Jktd, Reactor, 30/100 pel
-Plaudier 500 gel. G/L jktd. vac. reactor

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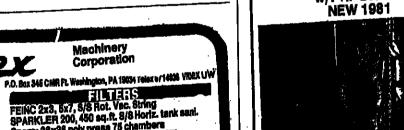
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HP exp prf mtr. (2)

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A tenegrous I.S. Wrole measuring 20.5" x of 2. 48 His as 300 mased reducer, 34.2:1 faile in tinitial part speed div. incl 6/9 margaille allender, and 14-2:1-8 and feeder.

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(12) 40" x 60" Bird decanter, S/ST, 15/3 deg.

contour, 5" pitch, single lead conveyors, w/

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burner, all fans, duct work & controls, multi-cy-

cione collector, Siy 30,000 CFM baghouse.

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Type SB80-06-177, SST, w/7 HP DRIVE.

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-Mdi SJI-42-22, 42" dia x 22' lg, incolloy 800 w/carbon steel jacket, 100

-Mdl SJI-52-32, 54" dia x 32' lg, incolloy 800 w/carbon steel jacket, 125

-Mdl SJS-24-16, 24" dia x 16' lg, 304 S/ST, dimple jacket, 50 HP vari drv.

-36" x 72", inconel, 10 deg. cylinder, 150 HP mtr, w/wash-out assembly,

(3) Raymond high side roller mills, mdl 5057, double whizzer separator, fan, feeder, cy-cione, duct work & bucket elevator.

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316 S/ST, mdl CRJ-S84-29, 1100 cu. ftl, 150 HP drv, 550 sq. ft. of heat transfer area, 84" dia x 29' lg.

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December 22, 1986

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December 22, 1986 CHEMICAL MARKETING REPORTER

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Continued from Page 27

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POLYETHYLENE GLYCOL 400 2 csk (1012 (bs) (Cigrence) Rollerdam, 11/6.
POLYBTYRENE Para American Container 7 cs (10692 ibs)
(Almudena) Genos, 11/9.
POLYTETRAFLUOROETHYLENE POLYMERS Sumit-

omo of America 144 dms (17778 ibs) (McKinney Meersk) Kobe, 11/7. POLYURETHANE GRANULES Pat Products 19 bin

POLYURETHANE GRANULES Pat Products 19 DIN (43568 bs) (Allantic Conveyor) Liverpool, 11/6. 468 sks (0 ibs) (Sea Land Express) Rotterdam, 11/14. POLYVINYL ALCOHOL Marubent America 900 bgs (40596 bs) (McKinney Meersk) Kobe, 11/7. POLYVINYL CHLORIDE Enicham 800 bgs (45804 lbs)

(Almudena) Leghorn, 11/9. POPPY SEEDS Little India Stores 5 pkg (223 lbs) (Hoegh Danaos) Bombay, 11/16. POPPYSEEDS Schill Food Products 1000 bgs (55115

Ibs) (Estoril) izmir, 11/10.
POTASSIUM CARBONATE T R America Chemicals 520 bgs (0 lbs) (Sea Land Express) Rotterdam, 11/14.
POTASSIUM CHLORATE Paralpina 1 bxs (119 lbs)

(American Georgia) Bramernavan, 11/10.
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(Export Patriot) Leghorn, 11/18.
POTASSIUM DICHROMATE American Chrome & Chemicals 16 ptt (45309 ibs) (Clarence) Rotterdam, 11/8.
POTASSIUM METABISUL FITE 242 pkg (27558 ibs) (See

POTASSIUM METABISULFTTE 24¢ prg (27000 tos) (384 Land Express) Roltordam, 11/14. POTASSIUM PERMANGANATE American Intl 360 dms. (43475 lbs) (American Georgis) Roltordam, 11/10. POTASSIUM PERSULFATE Mitsubishi Intl 640 bgs (35697 lbs) (Ming Sun) Yokohama, 11/12.
POWDERED HORSERADISH JFC Intl 10 ctn (0 lbs) (Ming

Suni Yokohama, 11/12 New York Mutual Trog 176 ctn (Olbs) (Ming Sun) Yokohama, 11/12.
POWDERED WATTLE MIMOSA EXTRACT Barkey Intl

4800 bgs (284554 ibs) (American Georgia) Rotterdam, 11/10
PROCAINE PENICILLIN G NON STERIL American Cyanamid 200 dms (23810 lbs) (Kiso Maru) Nagoya,

PSYLLIUM SEED HUSK POWDER Rowell Laboratories 380 dms (41799 lbs) (Hoegh Danaca) Bombay, 11/

PSYLLIUM SEEOS Meer 215 bgs (36980 lbs) (Addiriyah) Dubal, 11/18.

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Danaos) Bombay, 11/16. SAGE LEAVES Ludwig Mueller 341 bgs (11277 lbs) (Esto-

McCornick 552 bgs (11038 lbs) (Estorii) izmir, 11/10. Morris J Golombeck 94 bis (11023 lbs) (Estorii) izmir, SAGO SEEDS Bharet Bezear 25 bgs (2811 be) (Hoegh

Dansos) Bornat Bezaar 25 bgs (2811 bs) (Hoegh Dansos) Bornbay, 11/16.
SILICA GROUND Enron 158 kgs (26138 lbs) (American Georgia) Felixatowe, 11/10.
SILICA POWDER Kuehne & Nagel 20 unt (45371 lbs) (Ocean Legend) Yokohama, 11/17.
SODIUM AMMONIUM YANADATE 90 kgs (37699 lbs) (American Georgia) Rotterdam, 11/10.
SODIUM BENZOATE FLAKES American Intil Chemical 680 bgs (45194 lbs) (ER Brussei) Rotterdam, 11/17.
SODIUM CHI DRITE Decrease 238 dray (44388 lbs) (has 1500 lbs) (AMERICAN CHI DRITE Decrease 238 dray (44388 lbs)) (has 1500 lbs) (has 1500 l

680 bgs (45194 lbs) (E.R. Brussel) Floriterdam, 11/17. SODIUM CHLORITE Degusse 238 dms (44396 lbs) (Dart Britain) Brementaven, 11/12. SODIUM CHLORITE FORMULA A.T.R. America Chemi-

cals 63 dms (0 lbs) (Sea Land Express) Rotterdam,

SODIUM DIGHLORO S TRIAZINETRIONE OIn 118 dms (34079 lbs) (E R Brusse) Felixstows, 11/17.
SCDIUM ERYTHORBATE PMP Fermentation Products 320 dms (38096 lbs) (Ming Sun) Kobe, 11/12.
SCDIUM HEXAMETAPHOSPHATE 16 bbg (35468 lbs) (Amarican New York) Kobe, 11/10.
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SCDIUM HEXAMETAPHOSPHATE ACAMETARY 100.

YOR, KOBE, 11/10.
SODIUM HYPOPHOSPHITE MONOHYDRATE 124 dms
(41204 lbs) (Addiriyah) Fos, 11/18.
SODIUM METHYLATE Hanlel Phoenix Transport 1 dms (0 lbs) (See Land Express) Bremsrheven, 11/14.
SODIUM PERBORATE TETRAHYDRATE Degussa 420 bgs (42463 lbs) (American Georgie) Rotterdam, 11/10.

SODIUM PEROXIDE Panalpina 5 bxa (143 lbs) (American Georgia) Bremerhaven, 11/10. SODIUM PERSULFATE Mitsubishi Inti 1280 bgs (1394 ibs) (Ming Sun) Yokohama, 11/12. SODIUM PERSULPHATE Degussa 20 bbg (42858 ibs)

(Sea Land Express) Bramerhaven, 11/14. SODIUM THIOSULPHATE 680 bgs (37778 bs) (Ace Accord) Hong Kong, 11/12.



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place, he says, viewing plastics as a rawma. terial outlet can only ensure failure.

SODIUM TRIPOLYPHOSPHATE Advant Chemical 483 bgs (49008 lbs) (Clarence) Rotterdam, 11/6. 560 bbg (867906 lbs) (Clarence) Rotterdam, 11/8. SULFAMETHOXAZOLE Shlonogs 84 dms (10186 lbs) (McKinney Maerak) Kobe, 11/7. SULFURYL CHLORIDE 1 thk (40344 lbs) (E R Brussel) To reinforce its position in the poly. cthylene and polystyrene markets, Dow is planning expansions. By the end of next year, the company will have 335 million pounds of HDPE capacity in the US, 675 million pounds in the rest of the world. Its LDPE capacity TANGERINE OIL Intran 22 dms (9894 lbs) (Rouen) Rotterwill total 845 million pounds in the US and dem, 11/13.
TARTARIC ACID POWDER Tartaric Chemicals 620 mix 1930 million pounds in other countries, while TARTARIC ACID POWDER Tartate Chemicals 920 mix (45856 lbs) (Almudena) Genoa, 11/9. TEAK OIL Scandinavian Design 45 pkg (1190 lbs) (Clarence) Bremerhaven, 11/6. TERPINEOL PERFUMERY E L Scott 29 dms (13971 lbs) "Dowlex" LLDPE capacity will reach 850

(Almudena) Cadiz, 11/9.

TETRACAINE HYDROCHLORIDE 1 dms (121 lbs)

(Rouen) Rotterdam, 11/13. TETRAMETHYL GUANIDINE Degussa 18 dms (7718 lbs)

(E A Brussel) Antwerp, 11/17. TETRAMETHYL THIURAM DISULPHIDE Prochimie inti

756 bgs (43924 lbs) (Clarence) Rotterdam, 11/6.
THIOGLYCOLIC ACID Caratab 64 dms (41341 lbs) (Sea Land Extress) Bremerhaven, 11/14.

Land Express) Bremerhaven, 11/14. THIONYL CHLORIDE Uniroyal 2 tok (78748 lbs) (E R

Brussel) Rotterdam, 11/17. THYME LEAVES Herbert Marmorek & Sons 283 bgs

(31195 lbs) (Ever Shine) Vatencia, 11/17.

TANIUM DIOXIDE RUTILE Rhone Poulenc 4800 bgs
(284023 lbe) (Rouen) LeHavre, 11/13.

TANIUM DIOXIDE Dar Tech 880 bgs (144137 lbs) (Sea

Land Leader) Algebras, 11/12. Kronos Titan 32 pit (82540 lbs) (John M) Rotterdam.

(19665 lbs) (Ming Sun) Yokohama, 11/12. RICHLOROTRIFLUOROETHANE 1 bks (39683 lbs) (Al-

mudena) Bilbao, 11/9. RIMETHYLCYCLOHEXANOL Nuodex 70 dms (36321

(Rouen) Felixatowe, 11/13. FURKISH LAUREL LEAVES William E Martin 241 bis (26455 lbs) (Addiriyah) Fos, 11/18. FURKISH OREGANO LEAVES 1259 bgs (25203 lbs) (Ad-

diriyah) Fos, 11/18 TUMERIC FINGERS McCormick 240 bgs (33492 lbs)

(Hosgh Danaos) Cochin, 11/16.
TYLOSE MHB 19 bgs (1065 lbs) (Clarence) Rotterdam,

ULTRAMARINE PIGMENT Whittaker Clark & Daniels 720 bgs (41310 lbs) (American Georgia) Felixstows, 11/ 10.

(Ace Accord) Hong Kong, 11/12. XYLENOL 2 tnk (87941 lbs) (E R Brussel) Rotterdam,

YELLOW CARNAUBA WAX FLAKES Frank B Ross 440

bgs (44484 lbs) (Itape) Fortalezs, 11/11. Robert S Baldini 440 bgs (44484 lbs) (Itape) Fortalezs,

YELLOW DYESTUFF Livingston Intl Freight 20 dms (2447

ibs) (Addiriyah) Dubal, 11/18. YERBA MATE Goya Foods 450 otn (21925 bs) (American

Apollo) Buenos Aires, 11/10.

ZINC CYANIDE Rit Chemical 178 dms (20082 lbs) (Ming Sun) Kobs, 11/12.

dustry consolidation will help producers

avoid the excesses of 1974 and 1979," he

said. Those producers who remain, he ex-

products to end-user needs. Adequate sup-

plies of raw materials will be needed to

SPECIALS

es res 35 mixer 18MS 3 van Sargent SS apron dryer 4'x20' & 12'x50' Raymond 3056 Histide mNa (2) Striver 18" ALF filter 316 58 46 Chambers, plete shifters, hydraulic (2) Change Can SS Vac. Ikt. mixer with (2) 1000 gal. WC kettles 125 HPXP unused

BAKER PERKINS JKT. MIXERS

SANCER PERKIPS UN I . WIR 30 gal. Sigma Soltom 400 HP 30 gal. Dispersion 15 JEM 2, chrome plate 50 HP 30 gal. Sigma DNM bottom 20 HP 30 gal. Sigma JNM 1120 HP 50 gal. Dispersion Mixer-Extruder 100 HP 15 gal. Sigma Tit. 15 HP 5 gal. Sigma AMK SS Maer-Extruder 5 gal. Sigma Dispersion & Duplex 88 (3) Vs gal. Sigma Vs HP vari

Hull 46 & 180, Sg. Ft. Lyophilizer's Stoppering Hull 260 Sq. Ft. 85 vac. Shelf Dryer's Westfella centriluges BAMN 18007 & SAMR 15037 Chemapeo 19,000 gal. 85 fermenter agit. 120 HP BP 100 gal. 15 VIM Bigma Mixer 30HP Cekes 55 mixer 8MB 3 vari

Banbury mixers # 3 A, 3 D, & #11 D APV Parallow pasteurings to #11 D

Ribbon Blendera SS. jkl., 30 & 20 cu. 1.
Ribbon Blendera 11/4, 5, 17.5, 90 & 215 cu. 0.
Altentle Research cone mixer #8 CV
Day Nauta MBX 980 jkt. 408.5 HP
Day SS Nauta Mixera 22, 71, a 700 cu.ft.
P.-K Conical Blendera 5, 15, 20, 60 cu.ft.
Day Pony Mixera SS 50, 60, 125, 175 gal.
Simpson Midlera SS 24, #1 FI WIJSED 4, #2
FB Benbury mixera #1, 30, 9 & 110

Dow Is Bullish

Continued from Page 3

NGERGREEN OIL NATURAL Regie 60 cm (8466 lbs)

IbS) (Clarence) Rotterdam, 11/6. PHENYL PHOSPHATE Monsanto 640 bgs (36773 lbs)

the rest of the world. Three "Dowlex" LLDPE expansions are currently in progress, Mr. Shobe says. At the company's Freeport, Tx. plant, three incremental expansions, the first of which is now complete, will add another 119 million pounds of capacity by the end of 1987. By the 3rd quarter next year, 120 million pounds of capacity will be added at Dow's Plaquemine, LA. plant. Additional capacity is slated for Dow's Netherlands plant by the 2nd quarter of 1988.

million pounds in the US and 1380 million in

By 1991, the firm's capacity for HDPE should total 675 million pound, 335 million 11/8.
Lukens Chemical 880 bgs (44137 lbs) (Sea Land Leader) Algaciras, 11/12.
N L ind 3200 bgs (180582 lbs) (American Georgia) Rotterdam, 11/10.
3200 bgs (15962 lbs) (Rouen) Rotterdam, 11/13.
TOLUENE DISCCYANATE Montedison 72 dms (43016 lbs) (Export Patriot) Leghorn, 11/18.
TOLUENE METHYL ETHYL KETONE, MINERLAS, SPIR American Fuji Seat 17 cs (1517 lbs) (McKinney Maersk) Tokyo, 11/7.
TRIALLYL ISOCYANURATE Correl & Onel 40 dms (19685 lbs) (Ming Sun) Yokohama, 11/12. pounds of it in the US; capacity for LDPE should total 1985 million pounds (846 million pounds of it in the US), and that for LLDPE will total 2120 million pounds, 1400 million pounds of it in the US.

### **EXPANSIONS IN CAPACITY**

Next year, incremental expansions in Midland and Joliet will add another 200 million pounds of polystyrene capacity to Dow's to-

Dow sees the need for a new "Styron" plant, to replace some current capacity. Plans are still in the proposal phase, but, when added, the new facility could bring Dow's polystyrene capacity in the US to 1,171 million pounds by 1991.

Among the products targeted for high growth this year are "Styron XL" high impact polystyrene, "Styron LR-175" ultra pure general purpose polystyrene and "Styron APR" general molding polystyrene.

The starring products in Dow's polyolefins lines are "Aspun" fiber-grade resin and "Dowlex ULDPE." "Aspun," said to be softer than both polypropylene and PET fiber, shows better wettability than either, and superior barrier properties to EVA resins in some applications. Unlike these plastics, it can be thermally bonded to polyethylene film, eliminating the need for expensive adhesives. It can withstand exposure to gamma ray sterilization, important now that this has become the standard process.

The product will offer consumers a 20 to 50 percent cost savings, Mr. Shobe stated is expected to find secure market niches in the disposable medical products, diaper, and personal care markets, where demand pext year could reach 750 million pounds.

plained, will be those who custom-design "Dowlex ULDPE," so far the only octenecomonomer ultra low density polyethylene weather hydrocarbon pricing cycles, and the available on the US market, is said to outper available on the US market, is said to outper ability to move quickly between feedstocks form butene-comonomer VLDPE in strength will be crucial. In this competitive market- and flexibility.

> GREAT BUYS FROM LOCATION but 30 cu. II., 26"x99", 10 HP

REACTORS-TANKS

2,000 gal. 88 reactors 150 pal. lkt. agit. (2) 1,000 gal. 88 reactors 150 pal. lkt., agit. (2) Plaudier 100 a 550 gal QL reactors 2,150 gal. 9.8, 100 pal 6'x8' (4) 2,800 gal. reactor 316 88, 75 psl + Vac./150 pal jk EVAP.—DRY

CENTRIFUGE Bird 35"x50" Hasteloy C centifuge Blaw Knox 1500 & 160 eq.1, 35 Evaporator LUWA This Film 200, 173, 120 & 20 aq.ft. STOKES Freeze Dryers 24 & 300 eq.ft. BIRD 24"x38" S.S. Cont. Cent. Bowen 16"x30"& 20"x80" SS apray drye' Holofilie 55 dryer-Chiller Model D1612-6 Abbe SS 2 ou. ft. conical vsc. drye'

GENERAL

Nash 89 Compressor size 1288-150 HP Reftz Prebreaker 300 HP SCR Drive R compressor 1000 clm, 100 pai 200 HP (ORK Turbomaster 7000 Ton Reftsb-1TOKES Model 540,284, T-4 T Presse leulin 89 Homogenizers MC 18, Naf 18 + MC 45



# **EPA Enforcement Set**

ging our crackdown on criminal violalast of the environmental laws," says Mr. floria "Individuals and companies which affilily break the laws must be held acuntable for their crimes and punished ac-

ther, the agency maintains an allinchigh of 769 active enforcement cases, ding 439 pending in U.S. courts.

Aministrative enforcement actions (dienforcement actions not involving court dios, with some including penalties) were splicantly higher under the federal toxics nesticides laws with actions concerning ons under the asbestos-in-schools regbillions accounting for many of those taken oler the toxics law, the Toxic Substances outrol Act (TSCA)

States took a total of 4,877 administrative forcement actions under the air, water. ikides and hazardous waste laws, up mm 3 978 last year.

Administrative enforcement actions mited under the Resource Conservation at Recovery Act (RCRA), the federal hazwww.waste management and disposal law. melower this fiscal year, down to 235 from

lowever, this year EPA tracked in its rewing system only actions issued to treatsat storage and disposal facilities, with a alemphasis on those facilities violating smilicant requirements which went into ef-MINOV. 8. 1985. The year before, the agency outed in its reporting system actions taken what major hazardous waste handling failities, including generators and transorters, as well as treatment, storage and

haddillon, many states have been authored to enforce RCRA. Thus, primary enmement responsibility has shifted to the এত The states issued 519 orders this year. pared to 459 orders in 1985.

ENFORCEMENT ACTIONS TAKEN Morcement actions this year were taken wintcommercial, private and federal hazwww.waste management facilities for a inity of violations. These included violaimothe Nov. 8, 1985 rules requiring faciliato certify that they have met certain Mwater monitoring and financial re-Mibility requirements and that they have imited an application for a final permit. malment, storage and disposal facilties witheve not been issued a final permit are sudered to be operating on "interim

facilities not meeting the certification re-Firements were to stop accepting hazardous lide after that date. Those closing down disposal units were to submit a "close a for those units meeting EPA facility ingstandards by Nov. 23, 1985.

Since then, 543 facilities out of 1538 inim status facilities have completed the Mydrei certifications; 995 facilities have dillerim status for not certifying. Closure shave been submitted by 887 facilities. Over the last year, EPA has taken enforceed action against 61 percent of all violanof the requirements. The agency has ineded 99 percent of all facilities which willed and 95 percent of those which did

Our highest enforcement priority under elderal hazardous waste law this year has than intensified effort to ensure that hazwaste facilities not meeting operatquirements are no longer in business," Mir. Thomas, "and that those remaining Abulness are in full compliance with the mards. In one year, we have inspected of enforced against over 60 percent of lang remaining violators being devel-

Ity-eight enforcement actions against RCRA facilities involve court cases have been developed and referred to be Justice Department. The Justice Department. has filed 19 of those cases. The 38 cases dide 29 for not-certifying for one or more e requirements and nine for invalid cerlons. All 38 facilities continued to oper-Apaller Nov. 8, 1985.

or before Nov. 8, 1985, but failed to file a closure plan.

To date, 50 of the 83 facilities (81 percent) that operated without certifying have been enforced against; 12 of the 23 facilities (52 percent) considered to have invalid certifications have received enforcement actions: and 68 of the 129 facilities (53 percent) not submitting closure plans have received enforcement actions

# **Superfund Program**

Continued from Page 5 the executive order to prevent delays in

cleaning up superfund sites. The New Jersey Democrat, who chairs the House subcommittee with jurisdiction over superfund, asked the two agency heads to report to him by December 22 when the President will issue the order.

Both EPA and OMB have prepared drafts of the required order and the versions "reflect fundamental disagreements . . . that could both delay and undermine the effective implementation of the program, said Rep. Florio, author of the original superfund law.

There are two major issues which distinguish the EPA and OMB approaches to the new Executive Order." according to the congressman's letters.

The first involves OMB authority not only to review, but also to give final approval, to any EPA regulatory decision regarding cleanup," Rep. Florio said. "The second involves the role EPA will play in supervising cleanup of Federal facilities by the other Federal agencies and departments, particularly in the enforcement area."

"The OMB staff draft of the new superfund Executive Order continues the unfortunate precedent established in the original superfund Executive Order conferring on OMB the authority to approve or disapprove any revisions to the National Contingency Plan (NCP) that are either proposed or made final by EPA." the congressman stated.

"Because the NCP is the basic rule that governs how EPA will conduct cleanup, or supervise cleanup by others, this approach will give OMB final authority over the regulations which are the heart of the program, said Rep. Florio.

**OMB'S AUTHORITY** 

In contrast, he said the EPA staff draft of the new order only gives OMB authority to "review" such proposed or final NCP revi-

"OMB operates without regard to the procedural and substantive safeguards that afford due process to all those involved in EPA rulemakings," Rep. Florio remarked. "To grant an agency that operates without such saleguards the ability to reverse, without public notice or comment, any regulatory decision is both unwarranted and unacceptable." he said.

Rep. Florio said OMB would give authority to supervise the cleanups of waste sites on Federal property to the military services and civilian agencies that created the sites to begin with. OMB would also strip EPA of the authority to assess penalties against Federal

'The dismal track record of other agencies and departments in addressing the Federal facility waste site problem motivated Congress to adopt a series of rigorous provisions in the new superfund law which are designed to force such agencies to deal quickly and comprehensively with the thousands of sites on Federal lands," said Rep. Florio.

"The centerpiece of the new law's requirevery one of these affected facilities ments is EPA's statutory role as the supervisor and final arbiter of Federal facility with many more enforcement actions cleanups," the congressman noted. "The Congress was convinced that only by putting EPA in charge could we ensure the implementation of an effective cleanup program. OMB's efforts to restrict this role . . . flouts this clear Congressional intent."

# **Laboratory Standards**

Continued from Page 4

other than compilance with existing limits on official compilation of the comp

tion and training procedures for workers, medical consultations and provisions for Dioxin Suit Filed evaluating exposures, "the content of these measuers and the degree of protection afforded is left totally to the discretion of em-

The ICWU and the health research group questioned in their comments whether any proposal that gives employers "broad license to comply or not to comply" can be considered a standard.

**Chemical Specialties Manufacturers Asso**clation is urging OSHA to promulgate the proposed rule only as a voluntary standard for at least those laboratories in the industrial or manufacturing sector, currently covered by the agency's hazard communication standard. CSMA contends that OSHA has failed to

demonstrate a need for a final standard and notes that most industrial laboratories already have programs in place with precautionary measures similar to those required by the proposed standard to reduce toxic exosures to workers.

"A mandatory standard in this area will only become an additional regulatory burden resulting in needless expense and rigidity on the regulated industry," says CSMA.

Continued from Page 5

wastes into landfills for another two years. EPA says the extension is necessary because f a shortage of national incineration capac-

During this period, the rule would allow disposal of the wastes into surface impoundments or landfill units that do not have double liners or leachate collection systems that would prevent releases to groundwater.

The two groups also charge that the final regulation fails to impose meaningful restrictions on the storage of restricted wastes, thus allowing generators to store the materials indefinitely.

Although the organizations are contesting certain aspects of the final rule, they say they are pleased by improvements made since EPA proposed the original rule last January. At that time, EPA had proposed and allowed disposal of untreated wastes even if those wastes were likely to leak out of a surface disposal facility and into drinking water

Opposition by environmentalists, Congress and others forced EPA to reverse its

# CHEMICAL PROFILE

Continued from preceding Page

WEAKNESS

Detergent use continues to decline as liquid detergent popularity grows and soap makers reformulate away from phosphates and silicates. Advanced oil recovery applications have been postponed until the 1990's due to the world oil glut. Silicate use in steel and mining has been hurt by the decline in those Industries.

### outlook

Consumption by the detergent industry has most likely bottomed out and should stay level or grow slightly. The catalyst business provides the best future prospects for captive producers. Continued silicate use as a water treatment vehicle has the most long-term potential for merchant makers.

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# CHEMICAL PROFILE

# SODIUM SILICATES December 22, 1986

SUPPLY	
PRODUCER	CAPACITY*
Chemical Products, Cartersville, Ga	15,000
Du Pont (4 sites)	105,000
Engelhard, Attapulgus, Ga	7,000
Ethyl, Pasadena, Tex	100,000
Grace, Lake Charles, La	65,000
J.M. Huber (2 sites)	100,000
Mayo Products, Mableton, Ga	25,000
Occidental (7 sites)	250,000
PPG (2 sites)	110,000
PQ (12 sites)	420,000
Stauffer (2 sites)	70,000
Z-Tech, Bow, N.H	1,000
Total	

\*Short tons per year, anhydrous glass basis. Du Pont has announced it will sell three production sites to Power International Ltd., Melbourne, Australia, by the end of 1986. Du Pont will keep its East Chicago plant for captive requirements. J.M. Huber's second site, at Havre De Grace, Md., will come on stream in early 1987. Occidental acquired Diamond Shamrock's chemicals business in August 1986. Stauffer's parent company, Chesebrough-Pond's is being acquired by Unliever NV. Z-Tech, a subsidiary of iCI Australia, was acquired from Ferro Corporation in September 1986. CPC, Du Pont, Occidental and PQ are merchant sodium silicate producers. Z-Tech and Englehard sell byproduct in the merchant market. Ethyl, Grace, Huber and PPG consume all product captively in pigment and catalyst production. Mayo and Stauffer make only sodium metasilicates; CPC, Occidental and PQ also make metasilicates. Profile last published 12/26/83; this revision, 12/22/86.

### DEMAND

1985: 740,000 tons; 1986: 740,000 tons; 1990: 800,000 tons.

Historical (1976-1985): 0.5 percent per year; future: 1 to 2 percent per year through 1990.

Historical (1952-1986): High, \$6.30 per 100 pounds, 40.6 to 41.6 degrees Baume, 3.22 to 3.25 ratio, tanks, frt. equald.; low, 90c. per 100 pounds, same basis. Current: \$6.30 per 100 pounds, same basis; \$15.70 per 100 pounds, 3.22 to 3.25 ratio, 100 percent (solid), frt. equald.

Soaps and detergents, 29 percent; silica-type catalysts and gels, 26 percent; pigments, 22 percent; water, paper and ore treatment, 6 percent; paper adhesives, 5 percent; roofing granules, 4 percent; other, 8 percent.

Refinery fluid catalyst demand is up as oil refiners look to increase octane leids in the face of lead phase-down and lower gas prices. New techniques in waste-water treatment are creating silicate demand as a binding agent.

Continued on Page 45

# **Glaxo Unveils A New Agent** For Disorder

A new compound under development by Glaxo Holdings Plc of the UK has the potential to improve the treatment of such disorders as schizophrenia and anxiety, the company reported Friday (December 19) at a meeting of the British

Pharmacological Society in London. Glaxo also said the compound might be used to control the nausea and vomiting associated with anti-cancer treatment.

Glaxo stressed that the compound is still at a very early stage of development. Human clinical trials over the next five years should reveal the full extent of the advance in therapy represented by the compound, the com-

BLOCKS DOPAMINE RECEPTORS Glaxo said the drug works by blocking certain receptors in the brain, resulting in the modulation of other major neurotransmitter systems that affect various physiological

According to Glaxo, animal studies have shown that the compound can control the dopaminergic overactivity in the brain which is thought to be responsible for the symptoms of schizophrenia. This is accomplished without the drug affecting normal behavior, Glaxo says.

The sedative and movement side effects of current drug treatments are unlikely to be seen with the Glaxo compound, the company

Schizophrenia, a disabling disorder involving loss of contact with reality, affects up to 1 percent of the population. Its cause is still

# Velsicol Buyout Is Complete; Terms Unknown

Management of Velsicol Chemical Corporation have completed the buyout of the pest control and specialty chemicals firm from Farley Industries. Financial terms have not been disclosed.

Arthur R. Sigel, head of the five-member executive team purchasing Velsicol, will serve as president and chief executive officer. He said the timing of the buyout is

"ideal" for the management group. "There has been significant investment at Velsicol during the past four to five years towards growth," he said. "The foundation for this growth has been laid by our management group, so we are pleased to be able to assume full direction of the company at a time when Velsicol is on the verge of realiz-

ing some major goals." Joining Mr. Sigel in the purchase are Lawrence M. Hartman, ex-ecutive vice-president; Charles H. Frommer, vice-president of regulatory, government and public affairs; David M. Frederick, vice president of sales and marketing, and Charles R. Hanson, vice-president of environmental management.

Velsicol introduced a new rodenticide "Vengeance," to the professional pest control industry in September 1986. The company has also just announced it will be adding another soll termiticide to its product line in

### DETAILS UNDISCLOSED

While unable to disclose details at this time, Mr. Sigel said Velsicol expects to make additional announcements regarding new pest control and specialty chemicals products. Progress on new products will not be disrupted by the change in ownership, et

"The management team is very pleased that so many of Velsicol's professionals have chosen to remain with company," Mr. Sigel

"We are a tight, compact group that is used to working together. And we are exicted about the future of Velsicol and confident in our abilities." he said.

Mr. Sigel said Velsicol will employ nearly 500 people, including field sales personnel and workers at four manufacturing plants located at Marshall, Ill., Bayport, Texas, and at Memphis and Chattanooga, Tenn.

Velsicol also maintains six international offices for sales and service: Sydney, Australia (Australia and New Zealand), Tokyo, Japan (Japan and Korea), Sao Paulo, Brazi (Latin America), London, England (Western and Eastern Europe), Manila, Philippines (Southeast Asia), and Athens, Greece (Africa, India and the Middle East).

# **Cyro Producing** Acrylic at Osceola

Cyro Industries has begun production of acrylic sheet at a new plant in Osceola, Ark The \$25 million facility produces "Acrylite FF" continuously manufactured sheet used in window glazing, picture frames, signs, retail store displays and other applications.

The plant will also manufacture acrylic molding and extrusion compounds for use in automotive lighting lenses, lighting diffusers and other applications. These polymer-manufacturing facilities will be completed in mid-1987. When the facility is completed, Cyro will have a combined polymer and continuous sheet manufacturing capacity of 60 million pounds.

Cyro Industries is a partnership of sub-sidiaries of American Cyanamid Company and Rohm GmbH of West Germany. The company maintains its corporate headquarters in Woodeliff Lake, N.J., d conducts manufacturing operations at Fortier, La., and Wallingford, Conn. Cyro also operates an acrylic sheet manufacturing plant in San-

# JOBS & PEOPLE {{{ }}} JOBS & PEOPLE

myF.Mastro, who has been named executrice president and chief financial officer of the chemical Corporation. Mr. Mastro was waty vice-president of accounting and fi-erater US Diversified Group.

MEPH E. WHALEN has been appointed index of management systems for the Andler Company... ERNST A. COLEMAN spined Norton Performance Plastics as a technologist and manager of research development... CHARLES R. McDON-Diasbeen appointed regional marketing mager in the enhanced oil recovery detment of Chevron Chemical Company.

TANP. BONNER has been named techni-Isles representative as the West Coast aber of Rohm and Hans Company's watreatment team... RONALD L. DAVIS Bleen appointed senior staff counsel and soager of the litigation section of Dow mical Company's legal department... HRRY J. COLLINS has been named man-



BUSINESS BRIEFS



ager of information systems for North Amer-

ica, a newly created position at Norton Per-

LAWRENCE B. COHEN has been elected

executive vice-president of Cavedon Chemi-

formance Plastics.

**Diversified Chemicals** 

regional sales manager.

agents for the foam industry.

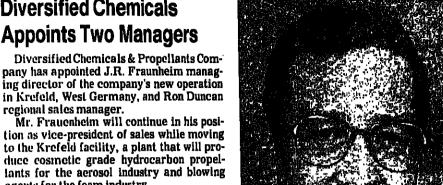
and Borden Chemical Company.

Prior to Mr. Duncan's association with Diversified, he had been involved in sales and

marketing for Stauffer Chemical Company

**Appoints Two Managers** 

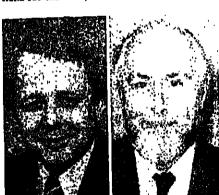
cal Company... J.D. BROOKS has been appointed director of sales and marketing for Pennwalt Corporation's Agchem Division. JOHN M. MOUNT has been named vice-



Gary Zwiercan, who has been appointed vice-president of the Foods Froducts Division at Na-tional Starch & Chemical Corporation. He will be responsible for food starch product and develent and technical service.

president of Chemed and elected a member of the company's board of directors... AN-THONY T. CASTOR III has been appointed president of Inland Specialty Chemicals Cororation, a wholly-owned subsidiary of Great Lakes Chemical Corporation... CARL R. CUTHBERTSON has been named Southeast district sales manager for Finetex Inc., Elmwood Park, N.J.

ROLFE B. CHASE has been appointed vicepresident of soda products manufacturing at Kerr-McGee Chemical Corporation's Scarles Valley, Calif., chemical complex... JOHN R. VANBUSKIRK, general manager of Phillips 66 Company's Plastics Division in Houston, has been selected to head all plastics operations for the firm, and J.R. BENZ, manager



# **ChemCentral Names Sales Representatives** ChemCentral Corporation has named Kristine Weigal sales representative for the Northern Milwaukee and Eastern Wisconsin territory and Henry Suwyn sales representa-

tive in the Grand Rapids, Mich., territory. Miss Weigal joined ChemCentral in Mil-waukee in early 1986 and took her training

Mr. Suwyn trained for his sales representative position at ChemCentral's Grand Rapids



of chemicals and catalyst in Bartiesville, has been named plastics resins manager of the company's Houston chemical complex.

THOMAS F. SANTINI has been appointed vice-president of scientific affairs at de Laire Inc... RICHARD M. MUELLER has been appointed to the new position of director of licensing at Glazo Inc... D.L. MANLOVE has been named director of food industry



**BUSINESS BRIEFS** 

marketing for Betz Laboratories. JOHN DOHERTY has been elected vicepresident for external affairs at National

neering and construction of Denka

# MEETINGS CALENDAR 章



61st annual dinner, Waldorf-Astoria Hotel, New York,

FERTILIZER INSTITUTE, 1987 annual meeting, Marriott

Orlando World Center, Orlando, Fla., February 1-3.

tional conference on flame retardancy and fire safety.

Sheraton New Orleans Hotel, New Orleans, La.,

FIRE RETARDANT CHEMICALS ASSOCIATION, interna-

New York, N.Y., June 11.

March 19; Spring luncheon, Sheraton Centre Hotel,

**December 22, 1986** 

### **JANUARY**

TRY, third highloft and fiberful conference. Executive Mariott Hotel, Charlotte, N.C., January 27-28.

CHEMICAL INDUSTRY ASSOCIATION, luncheon meeting, Parker Meridien Hotel, New York, January 29. COMMERCIAL DEVELOPMENT ASSOCIATION, 8th an-

nual industrial commercial development course, with Delphi Marketing Services, Inc., Sharaton Centre Hotel. New York, January 26-28 SOAP AND DETERGENT ASSOCIATION, 60th Annual Meeting and Industry Convention. Boca Raton Hotel

# and Club, Boca Raton, Fla., January 29-February 1, LATER ON

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS. center for chemical process safety, international con-ference on chemical safety Issues, Ornni Shoreham Hotel, Washington, D.C., February 3-5.

AMERICAN PETROLEUM INSTITUTE, 12th world DRUG, CHEMICAL & ALLIED TRADES ASSOCIATION, patroleum congress, international forum for exchange of technical information about the petroleum industry. in. Tex.. April 26-Mav

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, 12th annual Spring workshop and exhibition, Skyline Ottawa Hotel, Ottawa, Ontario, Canada, April 27-30. CHEMICAL GROUP OF NATIONAL ASSOCIATION OF PURCHASING MANAGERS, mid-Winter conference, "Purchasing — Opportunity in a Changing World." Baton Rouge Hilton Hotel, Baton Rouge, La., Febru-

CHEMICAL MARKETING RESEARCH ASSOCIATION. Houston Meeting: "The US Chernical Industry-Responding to Change." Westin Galeria Hotel, Houston Tex., February 4-5, 1987.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCI-ATION, 73rd mid-year meeting, Chicago Mariott Hotel, Chicago, III., April 26-29. CHINA CHEM '87, international exhibition on chemical and

petrochemical industries, China international Exhibilion Center, Beijing, China, April 3-9. CHLORINE INSTITUTE, Winter meeting, Mayflower Hotel, Washington, D.C., March 15-19.

INSTITUTE OF GAS TECHNOLOGY, 11th annual symposium on energy from blomass and wastes, Hotel Roya Piaza, Walt Disney World Village, Buena Vista, Fla., INTERNATIONAL PRECIOUS METALS INSTITUTE, 11th

international precious metals conference. Brussels. Belgium, June 14-18. INTER-SOCIETY COLOR COUNCIL, adentific conference, Williamsburg Lodge, Williamsburg, Va., Febru-

NATIONAL PETROLEUM REFINERS ASSOCIATION, 85th annual meeting, Convention Center, San Anto-nio, Tex., March 28-31; 12th international petrochemi-

Spring meeting, commercial de Castable systems, Fairmont Hotel, Dallas, Tex. April

SOCIETY OF MANUFACTURING ENGINEERS, 40 vanced ceramic /87 conference, Clarkon Hotel, Ondenati, Ohio, February 17-19.

SOCIETY OF PLASTICS ENGINEERS, South Total Sch tion, fifth international conference on polycleffs, Wyncham Hotel-Greenspoint, Houston, Tex., February 23-25; SPE-ANTEC, Bonaventure Hotel, Los Angeles, Calif., May 3-7.

SOCIETY OF THE PLASTICS INDUSTRY, 42nd girlled conference of the composites institute, Carcinati Convention & Exhibition Center, Cinchnati, Ohio. February 2-8; vinyl formulators division, 9th annual technical meeting and conference, Destin Fiton Hotel, Destin Fiton Annual 8-10. THE FERTILIZER INSTITUTE, 1987 Annual Meeting Mar-riott Orlando World Center, Orlando, Fla., February 1.3 1027

1-3, 1987.

OVANCED MATERIALS as an emerging Chemicals Division has developed a new stology will be covered in a luncheon ad-suby Dr. Harrie Runte the chief solution ad-Harris Burte, the chief scientist—acid stimulation in the Air Force Materials Laboratory at Solv" acidizing solvents, the products are de-In Systems, Inc.'s fifteenth annual procsevaluation/research planning seminar range of five formulations for use with difdebled for January 15-16 in New York. ferent types of crude oil. er H. Spitz, Chem Systems chairman, will Anthetwo-day seminar with a plenary talk Amovation and the chemical industry.

DOW CHEMICAL Company is offering pre-mium grade "Methocel" cellulose ethers for specialty applications in the Japanese phar-maceutical market. Japan is the world's SFCORPORATION says its "Ultraform" a copolymer grades H 2320, N 2320 and third largest pharmaceutical market, repre-No have received official listing by the senting a "significant business opportunity senting a "significant business opportunity ilional Santtation Foundation for use in for Dow," the company says. Dow claims to While water fittings and appurtenances. for Dow," the company says.

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the company says. Walorm" acetal copolymer is manufac-lulose and hydroxypropyl methylcellulose addy Ultraform GmbH, a joint venture of products. ASF and Degussa AG. The US subsidiaries

inhuliding an integrated production facility
Mobile, Ala., for startup in early 1988.

DU PONT COMPANY says it has obtained exclusive marketing rights to an advanced exclusive marketing rights. exclusive marketing rights to an advanced defilink Petroleum Inc.'s Oil Field system for monitoring anticoagulant ther-

apy from Biotrack Inc., Sunnyvale, Calif.
Terms have not been disclosed. Du Pont says
Terms have not been disclosed. Du Pont says Blotrack's Protime Test System is the first cal's polyethylene plant in Latexo, and engiite, accurate test for critical dosage management of the anticoagulant, warfarin. Du Pont's "Coumadin" is said to be the largest selling warfarin product, and is used widely to manage blood clots in patients. DYNAMIT NOBEL CHEMICALS has introduced a new line of metal alkoxides in clear,

stable solution form. The products are used to produce fine particle metal oxides via low energy sol-gel technology for the modification and property enhancement of catalysis, glasses, ceramics and advanced coatings. H-R INTERNATIONAL, an Edison, N.J., engineering and construction firm serving the Anderson Lane in Austin. The offices will be involved in contract maintenance for Texaco tion of its safety performance.

December 22, 1986

THERMOFIL INC. has introduced new, highly chemically coupled glass-reinforced polypropylene products available in 10 through 40 percent glass reinforcement levels. Thermolil says chemically coupled glass-reinforced polypropylene has the low-est cost per cubic inch of any engineering

Chemical's maleic

sion at Houston.

UNION CARAIDE Corporation says its Taft, La., plant set a company safety record, when energy, chemical and related industries, has opened two new offices in Toxas, at 4828 than 10 million hours without a lost workday Loop Central Drive, Houston, and at 400 Eas.